Access DB# 90672

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel (STIC) Examiner #: 62785 Date: 4-3-2003
Art Unit: 1654 Phone Number 308-3975 Serial Number: 10/038,612
Mail Box and Bldg/Room Location: CM1-11D13/CM1-9807 Results Format Preferred (circle): PAPER DISK E-MAIL
If more than one search is submitted, please prioritize searches in order of need. mej

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Short Peptides Which Selectively Modulate The Activity of Protein Kinases

Inventors (please provide full names): S. Ben-Sasson

Earliest Priority Filing Date: 9-25-1998

***For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.**

Please do an STN search on the following partial sequences:

[HVLMI][GDEA][VENQILMD][FDPAWYEG][NGQA];

[PQN][KR][NHQ][KRST][NEAQDGIL];

~~[KVMRIL]~~[LIMV][LMIV][AVILMG][GEDA];

[VPRILMK][ATQSNG][PEADG][PGA][LEIMVD];

[LYIMVFW][LIMV][NQ][KQRN][FFWY].

Please require any hits to have 5-7 residues.

Please exclude US 2002/0160478, WO 2000/18895 from any answer sets.

Thank you.

JER

****

STAFF USE ONLY

Searcher: Stacy Owens
Searcher Phone #: 305-4499
Searcher Location: _____
Date Searcher Picked Up: _____
Date Completed: 4/7/03
Searcher Prep & Review Time: _____
Clerical Prep Time: _____
Online Time: _____

Type of Search

NA Sequence (#) _____
AA Sequence (#) _____
Structure (#) _____
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN _____
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis _____
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

PTO-1590 (8-01)

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=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 10:31:43 ON 07 APR 2003
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FILE COVERS 1907 - 7 Apr 2003  VOL 138 ISS 15
FILE LAST UPDATED: 6 Apr 2003  (20030406/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=>
=>

=> d stat que l22
L21            6 SEA FILE=REGISTRY ABB=ON  PLU=ON  [LMIV][DTES][LIMV][MILV][NQ][
                  GA][GA][DE][LIMV][HRK][YFW]H[LIMV][SYTFW][QNH][HVLMI][GDEA][VEN
                  QILMD][FDPAYWEG][NGQA][PFWY][GA][FWY]/SQSP
L22            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21
1
=>
=>

=> d ibib abs hitrn l22 1-4

L22  ANSWER 1 OF 4  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2000:227759  HCAPLUS
DOCUMENT NUMBER:          132:262128
TITLE:                    Short peptides which selectively modulate the activity
                          of protein kinases
INVENTOR(S):              Ben-Sasson, Shmuel A.
PATENT ASSIGNEE(S):       The Children's Medical Center Corporation, USA; Yissum
                          Research Development Company of the Hebrew University
                          of Jerusalem
SOURCE:                   PCT Int. Appl., 148 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   3
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     WO 2000018895      A1   20000406      WO 1999-US22106  19990924
         W:  AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
             IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
             MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY,
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KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2343934	AA	20000406	CA 1999-2343934	19990924
AU 9960590	A1	20000417	AU 1999-60590	19990924
EP 1115847	A1	20010718	EP 1999-969737	19990924
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002525382	T2	20020813	JP 2000-572342	19990924
US 2002160478	A1	20021031	US 2002-38612	20020108

PRIORITY APPLN. INFO.: US 1998-161094 A 19980925
WO 1999-US22106 W 19990924

OTHER SOURCE(S): MARPAT 132:262128

AB Peptides which are peptide derivs. of the .alpha.D region of a protein kinase can modulate the activity of protein kinases. For example, the peptide derivs. of the .alpha.D region of Jak3 inhibit the proliferation of human endothelial cells and the human prostate cancer cell line PC3 in vitro at concns. as low as 0.3 .mu.M. Thus, the activity of a protein kinase in a subject can be modulated by administering one or more of these peptides. Also disclosed are methods of identifying a peptide deriv. of an .alpha.D region of a protein kinase that modulates the activity of the protein kinase.

IT **263139-75-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(.alpha.D region peptide; short peptides which selectively modulate the activity of protein kinases)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:464875 HCAPLUS
DOCUMENT NUMBER: 131:268893
TITLE: A novel form of rhodopsin kinase from chicken retina and pineal gland
AUTHOR(S): Zhao, Xinyu; Yokoyama, Kohei; Whitten, Mark E.; Huang, Jing; Gelb, Michael H.; Palczewski, Krzysztof
CORPORATE SOURCE: Department of Ophthalmology, University of Washington, Seattle, WA, USA
SOURCE: FEBS Letters (1999), 454(1,2), 115-121
CODEN: FEBLAL; ISSN: 0014-5793
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The G protein-coupled receptor kinases (GRKs) are important enzymes in the desensitization of activated G protein-coupled receptors (GPCR). Seven members of the GRK family have been identified to date. Among these enzymes, GRK1 is involved in phototransduction and is the most specialized kinase of the family. GRK1 phosphorylates photoactivated rhodopsin (Rho*), initiating steps in its deactivation. In this study, we found that chicken retina and pineal gland express a novel form of GRK that has sequence features characteristic of GRK1. However, unlike bovine GRK1 which is farnesylated, chicken GRK1 contains a consensus sequence for geranylgeranylation. Peptides corresponding to the C-terminal sequence of chicken GRK1 are geranylgeranylated by a cytosolic ext. of chicken liver. Based on results of mol. cloning and immunolocalization, it appears that both rod and cone photoreceptors express this novel GRK1. These data indicate a larger sequence diversity of photoreceptor GRKs than anticipated previously.

IT **207021-76-9**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(amino acid sequence; cloning and sequencing of novel form of rhodopsin kinase from chicken retina and pineal gland)
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:164440 HCAPLUS
DOCUMENT NUMBER: 129:1984
TITLE: Molecular forms of human rhodopsin kinase (GRK1)
AUTHOR(S): Zhao, Xinyu; Huang, Jing; Khani, Shahrokh C.; Palczewski, Krzysztof
CORPORATE SOURCE: Departments of Ophthalmology and Pharmacology, University of Washington, Seattle, WA, 98195, USA
SOURCE: Journal of Biological Chemistry (1998), 273(9), 5124-5131
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The G protein-coupled receptor kinases (GRKs) are crit. enzymes in the desensitization of activated G protein-coupled receptors. Six members of the GRK family have been identified to date. Among these enzymes, GRK1 (rhodopsin kinase) is involved in phototransduction and is the most specialized of the family. GRK1 phosphorylates photoactivated rhodopsin, initiating steps in its deactivation. In this study, the authors found that human retina expressed all GRKs except GRK4. Based on results of mol. cloning and immunolocalization, it appears that both rod and cone photoreceptors express GRK1. This conclusion was supported by the cloning of only GRK1 from cone-dominated chicken retina. Human photoreceptors also transcribe a splice variant of GRK1, which differs in its C-terminal region next to the catalytic domain. This novel variant, GRK1b, is produced by retention of the last intron. MRNA encoding GRK1b is exported to the cytosol; however, the level of the protein is relatively low compared with GRK1 (now called GRK1a), and GRK1b appears to have very low catalytic activity. Thus, these studies suggest that rods and cones, express the same form of GRK1.
IT **207021-76-9**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(amino acid sequence; detn. of G protein-coupled receptor kinase isoenzymes (GRK's) expressed in human retina and characterization of a rhodopsin kinase splice variants GRK1a and GRK1b expressed specifically in human photoreceptors)
REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1992:587201 HCAPLUS
DOCUMENT NUMBER: 117:187201
TITLE: The receptor kinase family: primary structure of rhodopsin kinase reveals similarities to the .beta.-adrenergic receptor kinase
AUTHOR(S): Lorenz, Wulfing; Inglese, James; Palczewski, Krzysztof; Onorato, James J.; Caron, Marc G.; Lefkowitz, Robert J.
CORPORATE SOURCE: Howard Hughes Med. Inst., Durham, NC, 27710, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1991), 88(19), 8715-19
CODEN: PNASA6; ISSN: 0027-8424
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Light-dependent deactivation of rhodopsin as well as homologous

desensitization of .beta.-adrenergic receptors involves receptor phosphorylation that is mediated by the highly specific protein kinases rhodopsin kinase (RK) and .beta.-adrenergic receptors kinase (.beta.ARK), resp. The cloning of a cDNA for RK is reported here. The reduced amino acid sequence shows a high degree of homol. to .beta.ARK. In a phylogenetic tree constructed by comparing the catalytic domains of several protein kinases, RK and .beta.ARK are located on a branch close to, but sep. from, the cyclic nucleotide-dependent protein kinase and protein kinase C subfamilies. From the common structural features it is concluded that both RK and .beta.ARK are members of a newly delineated gene family of guanine nucleotide-binding protein (G protein)-coupled receptor kinases that may function in diverse pathways to regulate the function of such receptors.

IT **143891-59-2**
RL: PRP (Properties); BIOL (Biological study)
(amino acid sequence of)

=> fil reg
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STRUCTURE FILE UPDATES: 6 APR 2003 HIGHEST RN 501901-52-6
DICTIONARY FILE UPDATES: 6 APR 2003 HIGHEST RN 501901-52-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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=> d .seq l21 1-6

L21 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 487599-29-1 REGISTRY
CN GenBank AAB05930 (9CI) (CA INDEX NAME)
OTHER NAMES:
CN GenBank AAB05930 (Translated from: GenBank U63971)
SQL 564

SEQ 251 VSLAYAFETK TDLCLVMTIM NGGDVRYHIY NVDEENPGFP EPRAIYYTAQ
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HITS AT: 267-289

L21 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2003 ACS
RN 484134-34-1 REGISTRY
CN GenBank AAD40189 (9CI) (CA INDEX NAME)
OTHER NAMES:

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CN   GenBank AAD40189 (Translated from: GenBank AF085240)
SQL  564

SEQ    251 VSLAYAFETK TDLCLVMTIM NGGDVRYHIY NVDEDNPGFS EPRAIYYTAQ
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HITS AT:   267-289

L21  ANSWER 3 OF 6  REGISTRY  COPYRIGHT 2003 ACS
RN   481424-72-0  REGISTRY
CN   GenBank AAA30752 (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   GenBank AAA30752 (Translated from: GenBank M73836)
SQL  561

SEQ    251 AYAFETKTDL CLVMTIMNGG DIRYHIYNVD EDNPGFQEPR AIFYTAQIVS
                   ======= ========== ======
HITS AT:   264-286

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

L21  ANSWER 4 OF 6  REGISTRY  COPYRIGHT 2003 ACS
RN   263139-75-9  REGISTRY
CN   L-Phenylalanine, L-methionyl-L-threonyl-L-isoleucyl-L-methionyl-L-
     asparaginylglycylglycyl-L-.alpha.-aspartyl-L-isoleucyl-L-arginyl-L-tyrosyl-
     L-histidyl-L-isoleucyl-L-tyrosyl-L-asparaginyl-L-valyl-L-.alpha.-aspartyl-
     L-.alpha.-glutamyl-L-.alpha.-aspartyl-L-asparaginyl-L-prolylglycyl- (9CI)
     (CA INDEX NAME)
SQL  23

SEQ      1 MTIMNGGDIR YHIYNVDEDN PGF
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HITS AT:   1-23

REFERENCE   1:  132:262128

L21  ANSWER 5 OF 6  REGISTRY  COPYRIGHT 2003 ACS
RN   207021-76-9  REGISTRY
CN   Kinase (phosphorylating), opsin (Gallus domesticus retina gene GRK1) (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN   GenBank AF019766-derived protein GI 2996094
CN   Kinase (phosphorylating), opsin (Gallus domesticus gene GRK1)
CN   Rhodopsin kinase (chicken retina gene GRK1)
SQL  593

SEQ    251 LNKKRLKKRQ GYEAAMVEKR ILARVHSRFI VSLACAFQTK TDLCLVMTLM
                                                          ====
       301 NGGDLRYHVY NVDEENPGFP EPRAVFYTAQ ILLGLEHLHQ HRIVYRDLKP
           ========== =========
HITS AT:   297-319

REFERENCE   1:  131:268893

REFERENCE   2:  129:1984

L21  ANSWER 6 OF 6  REGISTRY  COPYRIGHT 2003 ACS
RN   143891-59-2  REGISTRY
CN   Kinase (phosphorylating), opsin (cattle clone pRK protein moiety reduced)
     (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Kinase (phosphorylating), opsin (ox clone pRK protein moiety reduced)
OTHER NAMES:
CN   Kinase (phosphorylating), rhodopsin (ox clone pRK protein moiety reduced)
```

SQL 561

SEQ 251 AYAFETKTDL CLVMTIMNGG DIRYHIYNVD EDNPGFQEPR AIFYTAQIVS
======= ========== ======

HITS AT: 264-286

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 117:187201

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FILE COVERS 1907 - 7 Apr 2003  VOL 138 ISS 15
FILE LAST UPDATED: 6 Apr 2003  (20030406/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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=> d stat que l34
L1          1283 SEA FILE=REGISTRY ABB=ON  PLU=ON  ([HVLMI][GDEA][VENQILMD][FDPA
                 WYEG][NGQA]|[PQN][KR][NHQ][KRST][NEAQDGIL]|[KVMRIL][LIMV][LMIV]
                 [AVILMG][GEDA]|[VPRILMK][ATQSNG][PEAD][PGA][LEIMVD]|[LYIMVFW][L
                 IMV][NQ][KQRN][PFWY]/SQSP) AND SQL=<7
L2           843 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1
L3         15785 SEA FILE=REGISTRY ABB=ON  PLU=ON  PROTEIN(L)KINASE?
L4        134105 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR PROTEIN(5A)KINASE?
L6            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND L4
L7             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  US20020160478/PN OR WO20001889
                 5/PN
L8            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 NOT L7
L11        29068 SEA FILE=REGISTRY ABB=ON  PLU=ON  KINASE
L16       240660 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 OR KINASE
L17           44 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 AND L2
L18           25 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 NOT L8
L19           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND (?MODUL? OR ?REGULAT?
                 OR ?CONTOL? OR ?ACTIV?)
L21            6 SEA FILE=REGISTRY ABB=ON  PLU=ON  [LMIV][DTES][LIMV][MILV][NQ][
                 GA][GA][DE][LIMV][HRK][YFW]H[LIMV][SYTFW][QNH][HVLMI][GDEA][VEN
                 QILMD][FDPAYWEG][NGQA][PFWY][GA][FWY]/SQSP
L22            4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21
L23           21 SEA FILE=REGISTRY ABB=ON  PLU=ON  [LMIV][DTES][LIMV][MILV][NQ]|
                 [DTES][LIMV][MILV][NQ][GA]|[LIMV][MILV][NQ][GA][GA]|[MILV][NQ][
                 GA][GA][DE]|[NQ][GA][GA][DE]/SQSP AND SQL=5
L24            2 SEA FILE=REGISTRY ABB=ON  PLU=ON  [GA][DE][LIMV][HRK][YFW]|[DE]
                 [LIMV][HRK][YFW]H|[LIMV][HRK][YFW]H[LIMV]|[HRK][YFW]H[LIMV][SYT
                 FW]|[YFW]H[LIMV][SYTFW][QNH]/SQSP AND SQL=5
L25            9 SEA FILE=REGISTRY ABB=ON  PLU=ON  H[LIMV][SYTFW][QNH][HVLMI]|[L
                 IMV][SYTFW][QNH][HVLMI][GDEA]|[SYTFW][QNH][HVLMI][GDEA][VENQILM
                 D]/SQSP AND SQL=5
L28           32 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 OR L24 OR L25
L29           32 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT L21
L30           39 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29
L31           39 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 NOT (L8 OR L7 OR L19 OR
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L22)
L32 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND L16
L33 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L31 AND (?MODUL? OR ?REGULAT? OR ?CONTOL? OR ?ACTIV?)
L34 19 SEA FILE=HCAPLUS ABB=ON PLU=ON L32 OR L33

=>
=>

=> d ibib abs hitrn l34 1-19

L34 ANSWER 1 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:676157 HCAPLUS
DOCUMENT NUMBER: 137:226599
TITLE: Small peptides capable of **modulating** the bioadhesion and signal transduction functions of CD66 (CEACAM) family members
INVENTOR(S): Skubitz, Keith M.; Skubitz, Amy P. N.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068601	A2	20020906	WO 2002-US5720	20020227

W: JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
PRIORITY APPLN. INFO.: US 2001-272113P P 20010228
AB The present invention relates to peptides capable of **modulating** the function (e.g., signaling or adhesive **activities**) of CD66 (CEACAM) family members and/or their ligands. Specifically, a series of peptides derived from functional domains of CD66 antigens are used to **modulate** CD66-mediated cell adhesion or signal transduction.
IT **457858-34-3**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(amino acid sequence, peptide **modulating** CD66 function; small peptides capable of **modulating** bioadhesion and signal transduction functions of CD66 (CEACAM) family members)

L34 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:367212 HCAPLUS
DOCUMENT NUMBER: 136:364211
TITLE: Heregulin variants with improved binding to erbB-3 and erbB-4 receptors and their use in the therapeutic **modulation** of cell proliferation
INVENTOR(S): Ballinger, Marcus D.; Jones, Jennifer T.; Fairbrother, Wayne J.; Sliwkowski, Mark X.; Wells, James A.
PATENT ASSIGNEE(S): Genentech, Inc., USA
SOURCE: U.S., 58 pp., Cont.-in-part of U.S. Ser. No. 799,054, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6387638	B1	20020514	US 1998-101544	19980717
WO 9835036	A1	19980813	WO 1998-US1579	19980210

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1997-799054 B2 19970210
WO 1998-US1579 W 19980210

AB The present invention provides heregulin variants that are capable of binding an ErbB receptor. Included in the invention are variants of human heregulins, and, in particular, variants of human heregulin-.beta.1 having enhanced affinity for the ErbB-3 and ErbB-4 receptors. These variants include at least one amino acid substitution and can include further modifications. The invention also provides nucleic acid mols. encoding heregulin variants and related vectors, host cells, pharmaceutical compns., and methods. These variants can be used to promote survival of certain cell types in culture or to control proliferative disorders such as cancer. The EGF-like domains of heregulin .beta.1 were identified and essential amino acids identified by alanine-scanning. Substitution variants with increased affinity for erbB3 were identified by screening a phage display library. Anal. of variants showing binding to erbB3 identified changes assocd. with the change in binding properties.

IT **54017-28-6 301642-75-1**
RL: PRP (Properties)
(unclaimed sequence; heregulin variants with improved binding to erbB-3 and erbB-4 receptors and their use in the therapeutic **modulation** of cell proliferation)

REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:31480 HCAPLUS
DOCUMENT NUMBER: 136:82311
TITLE: Synthesis of peptide libraries for use in culture media
INVENTOR(S): Haaland, Perry D.; Sherman, Douglas B.; Campbell, Robert L.; Stewart, Walter William; Lloyd, Sheila A.; Erickson, Bruce Wayne
PATENT ASSIGNEE(S): Becton, Dickinson and Co., USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002591	A2	20020110	WO 2001-US17943	20010604

W: AU, BR, CA, CN, ES, IL, JP, KR, MX, NZ, RU, SG
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR

AU 2001075173	A5	20020114	AU 2001-75173	20010604

PRIORITY APPLN. INFO.: US 2000-608892 A 20000630
WO 2001-US17943 W 20010604

AB The present invention provides peptides libraries which are useful for

rapid identification of biol. **active** compds. The invention further provides peptides which include cell-growth affecting peptides and peptides which enhance or inhibit prodn. of cellular proteins. Many of the peptides of the invention may be produced in large quantity by recombinant techniques and formulated in culture medium to produce the desired effect on cultured cells and tissues. Certain of the libraries of the invention and the peptides identified in them are particularly useful in concatemer-based recombinant expression methods.

IT **387820-06-6P**
RL: BUU (Biological use, unclassified); CPN (Combinatorial preparation); PRP (Properties); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation); USES (Uses)
(protein sequence; synthesis of peptide libraries for use in culture media)

L34 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:320112 HCAPLUS
DOCUMENT NUMBER: 134:339530
TITLE: Antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae
INVENTOR(S): Galeotti, Cesira; Grandi, Guido; Masignani, Vega; Mora, Mariarosa; Pizza, Mariagrazia; Rappuoli, Rino; Ratti, Guilio; Scarlato, Vincenzo; Scarselli, Maria
PATENT ASSIGNEE(S): Chiron Spa, Italy
SOURCE: PCT Int. Appl., 947 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001031019 A2		20010503	WO 2000-IB1661	20001030

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-PV162616 19991029

AB This invention provides proteins and fragments thereof derived from the bacteria Neisseria meningitidis serotype A, N. meningitidis serotype B, and N. gonorrhoeae. Th protein sequences disclosed in International Application patents WO 1999/57280 and WO 2000/22430 were subjected to computer anal. to predict antigenic peptide fragments, using three algorithms: AMPHI, ANTIGENIC INDEX, and HYDROPHOBICITY. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto (e.g., antisense nucleic acids). Addnl., this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compns. of the protein fragments and/or nucleic acids for use as vaccines, diagnostic reagents, immunogenic compns., and the like. [This abstract record is the first of 8 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.]

IT **250171-30-3**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; antigenic peptides from Neisseria meningitidis

and Neisseria gonorrhoeae)
IT **336843-22-2 336847-50-8**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae)

L34 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:754447 HCAPLUS
DOCUMENT NUMBER: 133:317931
TITLE: Amino acid-substituted variants of heregulins capable of binding and **activating** ErbB receptors
INVENTOR(S): Ballinger, Marcus D.; Jones, Jennifer T.; Fairbrother, Wayne J.; Sliwkowski, Mark X.; Wells, James A.
PATENT ASSIGNEE(S): Genentech, Inc., USA
SOURCE: U.S., 58 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6136558	A	20001024	US 1998-20880	19980209

PRIORITY APPLN. INFO.: US 1997-37581P P 19970210
AB Heregulin variants that retain binding to an ErbB receptor are described. Included in the invention are variants of human heregulins, and, in particular, variants of human heregulin-.beta.1 having enhanced affinity for the ErbB-3 and ErbB-4 receptors. These variants include at least one amino acid substitution and can include further modifications. The invention also provides nucleic acid mols. encoding heregulin variants and related vectors, host cells, pharmaceutical compns., and methods. The smallest portion of the heregulin-.beta.1 epidermal growth factor-like domain that provided high-affinity receptor binding in the context of phage display was detd. by prepg. phagemid vectors that produced heregulin fragments fused to the C-terminus of M13 pIII. Alanine mutagenesis scanning of the heregulin-.beta.1 epidermal growth factor-like domain (residues 177-228) identified specific amino acids involved in binding to ErbB receptor-Ig fusions. The invention also provides nucleic acid mols. encoding heregulin variants and related vectors, host cells, pharmaceutical compns., and methods. Heregulin variants are useful in treating a wide range of diseases affecting the nervous system, musculature, epithelia, as well as the treatment of cancer.
IT **54017-28-6 301642-75-1**
RL: PRP (Properties)
(unclaimed sequence; amino acid-substituted variants of heregulins capable of binding and **activating** ErbB receptors)
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:641441 HCAPLUS
DOCUMENT NUMBER: 125:298963
TITLE: Identification of a cross-**reactive** continuous B-cell epitope in enterotoxigenic Escherichia coli colonization factor antigen I
AUTHOR(S): Rudin, Anna; Svennerholm, Ann-Mari
CORPORATE SOURCE: Dep. Medical Microbiology Immunology, Goeteborg Univ., Goeteborg, S-413 46, Swed.
SOURCE: Infection and Immunity (1996), 64(11), 4508-4513
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology

DOCUMENT TYPE: Journal
LANGUAGE: English

AB Enterotoxigenic Escherichia coli (ETEC) colonizes the intestine by means of several antigenically distinct colonization factors (CFs). Several of these CFs have very significant amino acid sequence similarity or identity, particularly in the N-terminal end. We have previously shown that a monoclonal antibody (MAb) raised against the subunits of colonization factor antigen I (CFA/I) fimbriae, which reacts with a peptide corresponding to the 25 N-terminal amino acids of such subunits, can inhibit attachment to intestinal cells of ETEC expressing heterologous as well as homologous CFs, with related amino acid sequences. In this study we have, by means of Pepscan anal., detd. the sequence of the MAb-specific linear epitope to be 15IDLLQ19. Parenteral immunization of rabbits with an N-terminal 25-mer synthetic peptide of CFA/I fimbrial subunit, either covalently coupled to bovine serum albumin or uncoupled, induced high titers of specific antibodies against this peptide as well as against CFA/I fimbriae. Increased titers against several heterologous CF fimbriae with a related N-terminal sequence were also induced, whereas no increase was seen against fimbriae with an unrelated sequence. Neither antisera against the coupled peptide nor antisera against the uncoupled peptide inhibited binding of CF-expressing bacteria to the human intestinal cell line Caco-2 in spite of high titers. The difference in the inhibitory capabilities of the antipeptide sera and the MAb might be due to slightly different epitope specificities. Thus, whereas the antipeptide sera bound to several continuous epitopes in the N-terminal end, none of them reacted specifically with the epitope 15IDLLQ19.

IT **182806-58-2**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(identification of a cross-**reactive** continuous B-cell epitope in enterotoxigenic Escherichia coli colonization factor antigen I)

L34 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:358357 HCAPLUS
DOCUMENT NUMBER: 125:80214
TITLE: Characterization of a soluble stable human cytomegalovirus protease and inhibition by M-site peptide mimics
AUTHOR(S): LaFemina, Robert L.; Bakshi, Kalpana; Long, William J.; Pramanik, Barnali; Veloski, Charlotte A.; Wolanski, Bohdan S.; Marcy, Alice I.; Hazuda, Daria J.
CORPORATE SOURCE: Dep. Antiviral Res., Merck Res. Lab., West Point, PA, 19486, USA
SOURCE: Journal of Virology (1996), 70(7), 4819-4824
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The human cytomegalovirus (HCMV) protease is a potential target for antiviral chemotherapeutics; however, autoprocessing at internal sites, particularly at positions 143 and 209, hinders the prodn. of large quantities of stable enzyme for either screening or structural studies. Using peptides encompassing the sequence of the natural M-site substrate (P5-P5', GVVNA/SCRLA), we previously demonstrated that substitution of glycine for valine at the P3 position in the substrate abrogates processing by the recombinant protease in vitro. We now demonstrate that introduction of the V-to-G substitution in the P3 positions of the two major internal processing sites, positions 143 and 209, in the mature HCMV protease renders the enzyme stable to autoprocessing. When expressed in Escherichia coli, the doubly substituted protease was produced almost exclusively as the 30-kDa full-length protein. The full-length V141G, V207G (V-to-G changes at positions 141 and 207) protease was purified as a sol. protein by a simple two-step procedure, ammonium sulfate pptn.

followed by DEAE ion-exchange chromatog., resulting in 10 to 15 mg of greater than 95% pure enzyme per L. The stabilized enzyme was characterized kinetically and was indistinguishable from the wild-type recombinant protease, exhibiting Km and catalytic const. values of 0.578 mM and 13.18/min, resp., for the maturation site (M-site) peptide substrate, GVVNASCRLARR (underlined residues indicate addns. to or substitutions from peptides derived from the wild-type substrate). This enzyme was also used to perform inhibition studies with a series of truncated and/or substituted maturation site peptides. Short nonsubstrate M-site-derived peptides were demonstrated to be competitive inhibitors of cleavage in vitro, and these analyses defined amino acids VVNA, P4 through P1 in the substrate, as the minimal substrate binding and recognition sequence for the HCMV protease.

IT **178691-20-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(characterization of a sol. stable human cytomegalovirus protease and inhibition by M-site peptide mimics)

L34 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:806659 HCAPLUS
DOCUMENT NUMBER: 123:280288
TITLE: Immobilization of biologically **active** molecules by changing the oxidation state of a chelated transition metal ion for affinity chromatography
INVENTOR(S): Anderson, Leslie D.; Cook, James A.; David, Gary S.; Hochschwender, Susan M.; Kasher, Mary S.; Smith, Michele C.; Stemmer, Willem P. C.
PATENT ASSIGNEE(S): Lilly, Eli, and Co., USA; Hybritech Inc.
SOURCE: U.S., 69 pp. Cont.-in-part of U.S. Ser. No. 647,901, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5439829	A	19950808	US 1992-826928	19920124
CA 2060235	AA	19920731	CA 1992-2060235	19920129
AU 9210545	A1	19920806	AU 1992-10545	19920129
AU 652021	B2	19940811		
ZA 9200617	A	19930729	ZA 1992-617	19920129
WO 9213965	A1	19920820	WO 1992-US679	19920130
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MW, NO, PL, RO, RU, SD				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
AU 9213652	A1	19920907	AU 1992-13652	19920130
JP 06157600	A2	19940603	JP 1992-15038	19920130
PRIORITY APPLN. INFO.:			US 1991-647901	19910130
			WO 1992-US679	19920130

AB A chelating agent is covalently bonded to a biol. **active** mol. such as an enzyme or antibody, the biol. **active** mol. is contacted with a support contg. a bound transition metal ion whereby the metal ion is chelated by the chelating agent and the oxidn. state of the metal ion is changed by treatment with an oxidizing or a reducing agent to provide a kinetically inert oxidn. state to immobilize the biol. **active** mol. on the support. The transition metal ion is preferably Co(II), Cr(II) or Ru(III) and the oxidn. state of the metal ion is changed to Co(III), Cr(III) or Ru(II), resp. The chelating agent can

be iminodiacetic acid (IDA), nitrilotriacetic acid, terpyridine, bipyridine, triethylenetetraamine, biethylenetriamine, 1,4,7-triazacyclonane or a chelating peptide. The chelating peptide may be incorporated into the primary structure of a protein (CP-protein) so as to provide the metal-chelating moiety, and the CP-protein may be produced by recombinant DNA technol. procedures. Certain chelating agents can immobilize more than one biol. **active** mol. at a metal ion site on the support. The immobilized biol. **active** mols. can be used in affinity chromatog. or in assay systems. CP-proteins constructed as examples include (1) the human papillomavirus type 16 E7 oncoprotein and (2) the human retinoblastoma anti-oncoprotein RB fused on their N-termini to the CP-peptide Met-His-Trp-His-His-His, (3) the CEM231.6.7 antibody pro-VH fragment possessing a His-Trp-His-His-His at the C-terminus of the VH fragment and a pro-VL fragment, and (4) the anti-CEA IgG1 heavy chain with a C-terminal peptide encoding His-Trp-His-His-His-Pro (assembled with human .kappa.-chain VL region to form the chimeric CHEL-13 antibody). CP-E7, CP-RB, and CP-CEM were locked to a hydrophobic resin support by oxidn. of the immobilized IDA-Co(II)-CP-protein complex, whereas CHEL-13 bound to nickel-mica..

IT **145004-44-0**

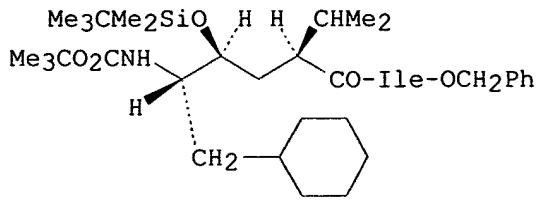
RL: NUU (Other use, unclassified); USES (Uses)
(chelating peptide; immobilization of biol. **active** mols. by changing the oxidn. state of a chelated transition metal ion for affinity chromatog.)

L34 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:234486 HCAPLUS
DOCUMENT NUMBER: 118:234486
TITLE: Preparation of phosphorus containing compounds as inhibitors of retroviruses
INVENTOR(S): Hester, Jackson B.; Fisher, Jed F.; Thaisrivongs, Suvit; Maggiora, Linda Louise; Sawyer, Tomi Kim
PATENT ASSIGNEE(S): Upjohn Co., USA
SOURCE: PCT Int. Appl., 159 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9217490	A1	19921015	WO 1992-US2238	19920327
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
AU 9217487	A1	19921102	AU 1992-17487	19920327
EP 578745	A1	19940119	EP 1992-910121	19920327
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06506463	T2	19940721	JP 1992-509356	19920327

PRIORITY APPLN. INFO.: US 1991-679508 19910404
WO 1992-US2238 19920327

OTHER SOURCE(S): MARPAT 118:234486
GI



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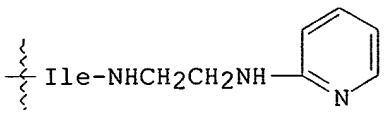

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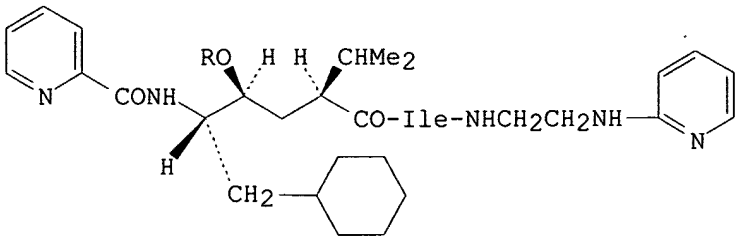

III

AB Phosphorus-contg. peptides X-C-D-E-F-G-Z [X = H, C1-C7 alkyl, aralkyl, alkylheterocyclyl, alkylcycloalkyl, substituted acyl; C-G = independently bond, amino acid residue, dipeptide transition state analog, phosphorylated amino acid, phosphorylated dipeptide transition state analog; Z = OH, alkoxy, (substituted) amino], having at least one O-phosphate monoester or diester, parent compds. thereof, and pharmaceutically acceptable salts thereof, were prepd. as inhibitors for mammalian cells infected with retroviruses. Thus, hydrogenolysis of benzyl ester I (prepn. given), followed by amidation with 2-(2-aminoethylamino)pyridine gave II. Deprotection of II followed by amidation with picolinic acid gave III (R = SiMe2CMe3), which was desilylated and phosphorylated to give a title deriv. III (R = PO3H2).

IT **136418-90-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. of, as HIV-1 protease inhibitor)

L34 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:97582 HCAPLUS
DOCUMENT NUMBER: 118:97582
TITLE: Method of immobilizing and crosslinking proteins and other molecules and uses thereof
INVENTOR(S): Anderson, Leslie Deriemer; Cook, James Allen; David, Gary Samuel; Hochschwender, Susan Marie; Kasher, Mary Seybold; Smith, Michele Ceceil; Stemmer, William Peter Christian
PATENT ASSIGNEE(S): USA
SOURCE: Eur. Pat. Appl., 88 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

EP 497585	A2	19920805	EP 1992-300775	19920130
EP 497585	A3	19930505		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
CA 2060235	AA	19920731	CA 1992-2060235	19920129
AU 9210545	A1	19920806	AU 1992-10545	19920129
AU 652021	B2	19940811		
ZA 9200617	A	19930729	ZA 1992-617	19920129
WO 9213965	A1	19920820	WO 1992-US679	19920130
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MG, MW, NO, PL, RO, RU, SD				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
AU 9213652	A1	19920907	AU 1992-13652	19920130
JP 06157600	A2	19940603	JP 1992-15038	19920130
PRIORITY APPLN. INFO.:			US 1991-647901	19910130
			WO 1992-US679	19920130

AB A method is disclosed for immobilizing and purifying proteins. Also provided is a method for the formation of a kinetically inert complex between a transition metal ion and a biol. **active** mol. or reporter group which possesses a metal binding site to form a kinetically inert complex between the CP-protein (CP = chelating peptide) and the bound metal ion. This kinetically inert (immobilized metal/CP-protein) complex provides a component of an assay system useful for studying the interaction of any of a variety of ligands with the immobilized CP-protein. Also provided is a method of purifying **immunoreactive** proteins (IPs; antibodies, antibody fragments, etc.) or receptors on a solid support. Immobilization of IPs or other biol. **active** mols. using the methodol. of the invention enables the orientation of the mols. so as to maximize exposure of the antigen or ligand binding site in an affinity chromatog. system. Further provided is a method of forming heterodimeric, homodimeric, or multimeric complexes by crosslinking .gtoreq.2 biol. **active** mols. or reporter groups with metal binding sites. Thus, plasmid p16E7e was constructed and expressed in Escherichia coli for the prodn. of a fusion product contg. the human papillomavirus 16 E7 oncoprotein sequence and a CP (Met-His-Trp-His-His-His) sequence. The protein was immobilized on a Co(II)-IDA-resin (IDA = iminodiacetic acid), and the resulting kinetically labile resin was converted to the corresponding kinetically inert resin by oxidn. of the Co(II) to Co(III). The resin bound RB (anti-oncoprotein derived from human retinoblastoma gene) specifically, and the binding could be diminished by competition with excess free E7 or CP-E7. Prepn. of an anti-carcinoembryonic antigen antibody construct contg. a CP, and immobilization of the antibody onto a Ni-mica surface via the CP, are also described.

IT **145004-44-0D**, conjugates with chelating agent and **immunoreactive** protein, metal complexes
RL: ANST (Analytical study)
(for immobilized metal ion affinity chromatog., kinetically inert metal oxidn. state in relation to)

L34 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	1989:421326 HCAPLUS
DOCUMENT NUMBER:	111:21326
TITLE:	Differential structural requirements for fibrinogen binding to platelets and to endothelial cells
AUTHOR(S):	Tranqui, Leone; Andrieux, Annie; Hudry-Clergeon, Gilbert; Ryckewaert, Jean Jacques; Soyez, Serge; Chapel, Agnes; Ginsberg, Mark H.; Plow, Edward F.; Marguerie, Gerard
CORPORATE SOURCE:	DRF, CEN, Grenoble, F38041, Fr.
SOURCE:	Journal of Cell Biology (1989), 108(6), 2519-27 CODEN: JCLBA3; ISSN: 0021-9525
DOCUMENT TYPE:	Journal

LANGUAGE: English
AB The fine recognition specificity of the cytoadhesins from human platelets and endothelial cells for the adhesive protein fibrinogen was analyzed. Two sets of synthetic peptides, Arg-Gly-Asp-X (RGDX, were X may be .gtoreq. 1 permissive amino acid substitutions) peptides and peptides corresponding to the C-temrinus of the fibrinogen .gamma. chain were compared for their structure-function relationships in the 2 cellular systems. Both the RGDX and .gamma.-chain peptides inhibit the binding of fibrinogen to platelets and endothelial cells. A marked influence of the residue at the C- and N-terminal positions of each peptide set can be demonstrated on the 2 cell types. The RGDX and .gamma. peptides have differential effects on platelets and endothelial cells with respect tro fine structural requirements. Thus, although the platelet and endothelial cytoadhesins may interact with similar peptide sequences, they express a different fine structural recognition.
IT **80755-85-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and fibrinogen binding of blood platelets and vein endothelial cells response to)

L34 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:490296 HCAPLUS
DOCUMENT NUMBER: 109:90296
TITLE: Platelet fibrinogen receptor and interfering peptides
AUTHOR(S): Andrieux, Annie; Charon, Marie Helene; Hudry-Clergeon, Gilbert; Chapel, Agnes; Marguerie, Gerard
CORPORATE SOURCE: Lab. Hematol., INSERM, Grenoble, 38041, Fr.
SOURCE: International Congress Series (1987), 745(Fibrinogen 2), 135-8
CODEN: EXMDA4; ISSN: 0531-5131
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The effects of synthetic peptides, representative of the .gamma. chain and Arg-Gly-Asp sequences of fibrinogen, on the interaction between human fibrinogen and blood platelets were studied. The min. **active** sequence of the .gamma. chain for inhibiting the binding of 125I-labeled fibrinogen to ADP-stimulated platelets corresponded to the C-terminal hexapeptide K6 (Lys-Gln-Ala-Gly-Asp-Val). The peptide Q5 (Gln-Ala-Gly-Asp-Val) and the .gamma. peptide L10 acetylated at the N terminus and lysyl position were **inactive**, indicating that the lysyl residue in position 406 was crit. for the inhibitory **activity**. The tripeptide Arg-Gly-Asp did not inhibit the fibrinogen binding to platelets, indicating that the presence of a 4th amino acid residue in the C terminus is crit. for the **activity**. Both Arg-Gly-Asp-Ser and Arg-Gly-Asp-Phe, 2 sequences of the fibrinogen .alpha. chain, inhibited the binding of fibrinogen to platelets. The concns. for 50% inhibition of fibrinogen binding for K6, Arg-Gly-Asp-Ser, and Arg-Gly-Asp-Phe were 180, 70, and 7 .mu.M, resp.; each peptide produced >90% inhibition of fibrinogen binding. When a platelet membrane ext. was applied to an affinity matrix column contg. immobilized Leu-Arg-Gly-Asp-Phe, the peptides Leu-Arg-Gly-Asp-Phe, Arg-Gly-Asp-Ser, and .gamma. peptide L10 were able to elute 1 major species: the glycoprotein IIb-IIIa complex. Thus, both the .gamma. and Arg-Gly-Asp-X (where X = another amino acid) sequences are involved in the physiol. interaction of fibrinogen with platelets.
IT **80755-85-7**
RL: BIOL (Biological study)
(fibrinogen binding by blood platelet response to, structure in relation to)

L34 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:435729 HCAPLUS
DOCUMENT NUMBER: 109:35729

TITLE: Endothelial cells and interfering peptides
AUTHOR(S): Tranqui, Leone; Andrieux, Annie; Charon, Marie Helene; Soyez, Serge; Chapel, Agnes; Marguerie, Gerard
CORPORATE SOURCE: Lab. Hematol., INSERM, Grenoble, 38041, Fr.
SOURCE: International Congress Series (1987), 745(Fibrinogen 2), 131-4
CODEN: EXMDA4; ISSN: 0531-5131
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The inhibition of fibrinogen binding to blood platelets and human endothelial cells (Ec) by peptides corresponding to the C-terminal region of the fibrinogen .gamma. chain was measured. Platelet and Ec receptors were similarly **reactive** to the most **active** peptide, the L10 decapeptide. Acetylation abolished the **activity** of L10. A min. of 9 residues was necessary to displace fibrinogen from the Ec receptor, whereas a 6-residue peptide was **active** on the platelet receptor. **Activities** of peptide analogs of the fibrinogen .alpha. chain contg. the sequence Arg-Gly-Asp on fibrinogen-Ec and -blood platelet interactions were compared. Apparently, the binding of fibrinogen to Ec proceeds through a receptor similar to that of the blood platelet fibrinogen receptor, which however exhibits a different recognition specificity.
IT **80755-85-7**
RL: BIOL (Biological study)
(endothelial cell-fibrinogen interaction inhibition by)

L34 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:481828 HCAPLUS
DOCUMENT NUMBER: 103:81828
TITLE: Side-chain modification of B29-lysine insulin and its effect on the binding with its antibody
AUTHOR(S): Zhu, Juhong; Zhu, Shangquan
CORPORATE SOURCE: Shanghai Inst. Biochem., Acad. Sin., Shanghai, Peop. Rep. China
SOURCE: Shengwu Huaxue Yu Shengwu Wuli Xuebao (1984), 16(6), 672-4
CODEN: SHWPAU; ISSN: 0582-9879
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB Porcine insulin (I) [12584-58-6] and a series of I derivs. with the .epsilon.-amino group of B29-lysine substituted were detd. by RIA with guinea pig anti-porcine I antibodies and radioiodinated I. Sensitivities were similar for I and its B29 substitutes; thus, the .epsilon.-amino group of B29 lysine of I did not participate in antibody binding. However, the RIA detn. sensitivity for a I dimer with crosslinking of the .epsilon.-amino groups of the B29 lysines of 2 I mols. with an adipoyl bridge was only .apprx.38.5% of unsubstituted porcine I; this was explained by steric hindrance.
IT **97707-74-9**
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by RIA, mol. structure in relation to)

L34 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:584048 HCAPLUS
DOCUMENT NUMBER: 101:184048
TITLE: Inhibition of fibrin polymerization by a peptide isolated from fibrin fragment D1
INVENTOR(S): Olexa, Stephanie A.; Budzynski, Andrei Z.
PATENT ASSIGNEE(S): Research Corp. , USA
SOURCE: U.S., 16 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4455290	A	19840619	US 1981-250173	19810402

PRIORITY APPLN. INFO.: US 1981-250173 19810402

AB A purified peptide was isolated by degrading fragment D1 of fibrinogen with plasmin [9001-90-5] followed by sepn. of the resulting peptides on the basis of mol. wt. and affinity for bound fibrin monomer. Thus, the peptide is useful as an anticoagulant and, when suitably labeled with a .gamma.-emitting radioisotope, as a thrombus imaging agent.

IT **80755-85-7P**
RL: SPN (Synthetic preparation); PREP (Preparation).
(prepn. of, from human fibrinopeptide D1, as anticoagulant and thrombus imaging agent in humans and lab. animal)

L34 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1984:136496 HCAPLUS
DOCUMENT NUMBER: 100:136496
TITLE: Platelet receptor recognition site on human fibrinogen. Synthesis and structure-function relationship of peptides corresponding to the carboxy-terminal segment of the .gamma. chain
AUTHOR(S): Kloczewiak, Marek; Timmons, Sheila; Lukas, Thomas J.; Hawiger, Jacek
CORPORATE SOURCE: Div. Exp. Med., New England Deaconess Hosp., Boston, MA, 02215, USA
SOURCE: Biochemistry (1984), 23(8), 1767-74
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Binding of fibrinogen to human platelets depends on the interaction of the chain-terminal segment with specific receptors exposed by different agonists such as ADP, epinephrine, and thrombin. The functions of a series of synthetic peptides encompassing the sequence of the 15 C-terminal residues of the .gamma. chain were investigated. Both pentadecapeptide (.gamma.397-411) and dodecapeptide (.gamma.400-411) inhibited binding of 125I-labeled fibrinogen to ADP-treated platelets, with the concn. causing 50% inhibition (IC50) being 28 .mu.M. In comparison, decapeptide (.gamma.402-411) was almost 4-fold less **active** (IC50 = 106 .mu.M), thus suggesting that the 2 histidine residues (.gamma.400-401) are required for a full inhibitory effect. A heptapeptide (.gamma.405-411) had a similar effect (IC50 = 102 .mu.M), whereas a pentapeptide (.gamma.407-411) was even less inhibitory (IC50 = 190 .mu.M), indicating that the lack of lysine (.gamma.406) further diminishes the **reactivity** of the platelet recognition site on the .gamma. chain of human fibrinogen. The heptapeptide (.gamma.400-406) contg. 2 histidine residues and derived from the dodecapeptide by proteolytic degrdn. with trypsin had very low inhibitory **activity**. The synthetic peptides inhibited fibrinogen-supported platelet aggregation in the same order of decreasing **reactivity**: pentadecapeptide = dodecapeptide > decapeptide = heptapeptide > pentapeptide. Modified synthetic pentadecapeptides bearing tyrosine or cysteinyltyrosine at the N terminus were prepd. to provide a means for radiolabeling and for formation of mols. of higher valency. Tyrosyl-.gamma.397-411 and the dimer cystinyl-(tytosyl-.gamma.397-411)2 obtained by the formation of a SS bond between 2 single peptides had the same inhibitory **activity** toward the fibrinogen receptor on platelets. Radiolabeled tyrosyl-pentadecapeptide exhibited specific binding to human platelets which was inhibited by the dodecapeptide (.gamma.400-411). A polyvalent conjugate of cystinyl-tyrosyl-.gamma.307-411 with human serum albumin was able to induce aggregation of

ADP-stimulated platelets which was blocked by pentadecapeptide (.gamma.397-411) or dodecapeptide (.gamma.400-411). Furthermore, a monospecific antibody Fab fragment directed against the peptide, encompassing residues .gamma.385-411, partially inhibited the platelet-aggregating function of the synthetic pentadecapeptide-albumin conjugate. Thus, a polyvalent peptide conjugate functioned as a synthetic fibrinogen substitute in the platelet aggregation system. Thus, the continuous sequence of the 12 amino acid residues at the C-terminal end constitutes the platelet recognition site for the .gamma. chain of human fibrinogen. This segment binds to specific platelet receptors and is involved in the aggregation of platelets.

IT **80755-85-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(blood platelet receptor recognition site **activity** of, of human)

L34 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:595420 HCAPLUS
DOCUMENT NUMBER: 99:195420
TITLE: Synthetic thymosin .beta.3 and .beta.4 analogs
INVENTOR(S): Low, Teresa L. K.; Goldstein, Allan L.
PATENT ASSIGNEE(S): George Washington University, USA
SOURCE: U.S., 8 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4395404	A	19830726	US 1982-378463	19820514
CH 652409	A	19851115	CH 1983-1978	19830413
DE 3316933	A1	19831124	DE 1983-3316933	19830509
DE 3316933	C2	19940224		
GB 2120256	A1	19831130	GB 1983-13215	19830513
GB 2120256	B2	19850807		
JP 59089648	A2	19840523	JP 1983-82876	19830513
FR 2526791	A1	19831118	FR 1983-8060	19830516
FR 2526791	B1	19870925		

PRIORITY APPLN. INFO.: US 1982-378463 19820514
GB 1982-19063 19820701

AB Title peptides R-X-Gly-Glu-Ser-X1-OH [R = H, acyl; X = null, Ala, Gln-Ala, Gln-MeGly, X2-Glu-Lys-Gln-Ala (X2 = null, Gln, Glu-Gln, Ile-Glu-Gln, Thr-Ile-Glu-Gln, Glu-Thr-Ile-Glu-Gln); X1 = null, X3-X4-Ala-Lys-Thr (X3 = Asp, Asn; X4 = null, Glu-Ile-Thr)], having **activity** in the **regulation**, differentiation, and function of T-cells, were prepd. by the solid-phase method. Thus, H-Gln-Ala-Gly-Glu-Ser-Asp-Glu-Ile-Thr-Ala-Lys-Thr-OH (I) was prepd. by the solid-phase method. I at 0.5 nmoles/mL exhibited 30.2% nonspecific inhibition of macrophage migration in peritoneal exudate cells.

IT **87811-25-4DP**, resin-bound
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deblocking-resin cleavage of)

IT **87811-46-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L34 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:89861 HCAPLUS
DOCUMENT NUMBER: 98:89861
TITLE: Preparation and properties of crosslinked insulins

containing a split peptide bond
AUTHOR(S): Wang, Chihchen; Chu, Shangchuan; Brandenburg, Dietrich; Wollmer, Axel
CORPORATE SOURCE: Inst. Biophys., Acad. Sin., Peking, Peop. Rep. China
SOURCE: Pept., Proc. Eur. Pept. Symp., 16th (1981), Meeting Date 1980, 389-94. Editor(s): Brunfeldt, K. Scriptor: Copenhagen, Den.
CODEN: 48NWA3
DOCUMENT TYPE: Conference
LANGUAGE: English
AB A1-B29-CMB-insulin (I, CMB = carbonylbismethionyl) was cleaved at the ArgB22-GlyB23 peptide bond by trypsin to give A1-B29-CMB-insulin with a split B22/23 bond. B1-Msc-DPI [Msc = MeSO2CH2CH2O2C, DPI = des-pentapeptide(B26-30)-insulin] was treated with CMB-(OC6H4NO2-p)2 and then coupled with Msc-Tyr-Thr-Pro-Lys-Ala-OH to give the protected insulin, which was deblocked to give A1-B29-CMB-insulin with a split B25/26 bond. The biol. **activity** of the split insulins are lower than that of I. The split insulins differ markedly from I in their CD spectrum; the split insulins have not kept the original conformation of I.
IT **84683-83-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and CD and biol. **activity** of)
IT **84683-86-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deblocking of)

L34 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:101574 HCAPLUS
DOCUMENT NUMBER: 96:101574
TITLE: Isolation, characterization and synthesis of peptides from human fibrinogen that block the staphylococcal clumping reaction and construction of a synthetic clumping particle
AUTHOR(S): Strong, Donna D.; Laudano, Andrew P.; Hawiger, Jacek; Doolittle, Russell F.
CORPORATE SOURCE: Dep. Chem., Univ. California, La Jolla, CA, 92093, USA
SOURCE: Biochemistry (1982), 21(6), 1414-20
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The 27-residue C-terminal CNBr fragment of human fibrinogen .gamma.-chains inhibits the interaction between fibrinogen and those strains of Staphylococcus used in the staphylococcal-clumping reaction. Blocking **activity** was abolished by treatment of the fragment with trypsin and chymotrypsin, but digestion with staph protease generated a 15-residue peptide which retained all blocking **activity**. The pentadecapeptide, the **activity** of which is lost upon digestion with trypsin and chymotrypsin, corresponds to the C-terminal 15 residues of the .gamma.-chain. The corresponding CNBr fragment was isolated from various fragments D generated by the action of plasmin on fibrinogen. Small (late) fragments D, which are well known to be lacking a substantial portion of the C-terminal region of the .gamma.-chain, did not yield fragments with blocking **activity**, whereas large (early) D fragments have .gamma.-chains that do yield fragments with blocking **activity**. Most of these large (early) fragments D have .gamma.-chains lacking the C-terminal 5-6 residues, however, indicating that the C-terminus itself of native .gamma.-chains is not essential for clumping. These shortened fragments, which were significantly less **active**, were not only sensitive to trypsin but also lost their blocking **activity** upon digestion with staph protease. A series of peptides was synthesized that corresponded to various C-terminal sections of the .gamma.-chain. Of these, a 15-residue peptide

corresponding to the staph protease-generated peptide exhibited blocking **activity** that was equiv. to and indistinguishable from native fragments by both biol. and chem. criteria. Shorter peptides had progressively less **activity**, and peptides with <10 residues were not detectably **active**. Appropriate synthetic peptides were attached to bovine plasma albumin and the polyvalent conjugates shown to clump the staphylococci directly. Under the same conditions, a control nonclumping strain was not affected.

IT **80755-85-7**
RL: BIOL (Biological study)
(Staphylococcus clumping reaction with, fibrinogen peptide reactions in relation to)

=>
=>

=> select hit rn l34 1-19
E48 THROUGH E64 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 10:53:07 ON 07 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
=>

=> d his l35

(FILE 'HCAPLUS' ENTERED AT 10:52:41 ON 07 APR 2003)
SELECT HIT RN L34 1-19

FILE 'REGISTRY' ENTERED AT 10:53:07 ON 07 APR 2003
L35 15 S E48-E64 AND L29

=>
=>

=> d .seq l35 1-15

L35 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **457858-34-3** REGISTRY
CN L-Glutamic acid, L-phenylalanyl-L-asparaginyl-L-valyl-L-alanyl- (9CI) (CA

INDEX NAME)
OTHER NAMES:
CN 173: PN: WO02068601 SEQID: 173 claimed sequence
SQL 5
RN **457858-34-3** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 FNVAE
=====
HITS AT: 1-5

REFERENCE 1: 137:226599

L35 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **387820-06-6** REGISTRY
CN L-Leucine, L-seryl-L-glutaminyl-L-leucyl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 22: PN: WO0202591 SEQID: 22 claimed sequence
SQL 5
RN **387820-06-6** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 SQLEL
=====
HITS AT: 1-5

REFERENCE 1: 136:82311

L35 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **336847-50-8** REGISTRY
CN L-Phenylalanine, L-alanyl-L-.alpha.-glutamyl-L-valyl-L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1413: PN: WO0131019 PAGE: 434 claimed protein
SQL 5
RN **336847-50-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 AEVRF
=====
HITS AT: 1-5

REFERENCE 1: 136:4714

REFERENCE 2: 134:339530

L35 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **336843-22-2** REGISTRY
CN Glycine, L-asparaginyl-L-alanyl-L-alanyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1022: PN: WO0131019 PAGE: 424 claimed protein
SQL 5
RN **336843-22-2** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 NAADG
====

HITS AT: 1-4

REFERENCE 1: 136:4714

REFERENCE 2: 134:339530

L35 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **301642-75-1** REGISTRY
CN L-Glutamic acid, L-valyl-L-asparaginylglycylglycyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 28: PN: US6136558 SEQID: 61 unclaimed sequence
CN 61: PN: US6387638 SEQID: 61 unclaimed sequence
SQL **5**
RN **301642-75-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 VNGGE
=====
HITS AT: 1-5

REFERENCE 1: 136:364211

REFERENCE 2: 133:317931

L35 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **182806-58-2** REGISTRY
CN L-Glutamine, N2-[N-[N-(N-L-isoleucyl-L-.alpha.-aspartyl)-L-leucyl]-L-leucyl]- (9CI) (CA INDEX NAME)
SQL **5**
RN **182806-58-2** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 IDLLQ
=====
HITS AT: 1-5

REFERENCE 1: 125:298963

L35 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **178691-20-8** REGISTRY
CN L-Alanine, N-[N-[N2-[N-(N-acetyl-L-valyl)-L-valyl]-L-asparaginyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified

type	------ location ------		description
terminal mod.	Val-1	-	N-acetyl

SQL **5**
RN **178691-20-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 VVNAA
=====
HITS AT: 1-5

REFERENCE 1: 125:80214

L35 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **145004-44-0** REGISTRY

CN L-Tyrosine, N-[N-[N-(N-L-histidyl-L-tryptophyl)-L-histidyl]-L-methionyl]-
(9CI) (CA INDEX NAME)
SQL **5**
RN **145004-44-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 HWHMY
=====
HITS AT: 1-5

REFERENCE 1: 123:280288

REFERENCE 2: 121:53484

REFERENCE 3: 118:97582

REFERENCE 4: 118:95575

L35 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **136418-90-1** REGISTRY
CN L-Histidinamide, N-[(1,1-dimethylethoxy)carbonyl]-L-phenylalanyl-N-[4-
(cyclohexylmethyl)-2-hydroxy-1-(2-methylpropyl)-5-[[2-methyl-1-[[(2-
pyridinylmethyl)amino]carbonyl]butyl]amino]-5-oxopentyl]-,
[1S-[1R*,2R*,4S*,5(1R*,2R*)]]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
replacement	Ala-4	-	carba

SQL **5**
RN **136418-90-1** REGISTRY
FS PROTEIN SEQUENCE
SQL **5**

SEQ 1 FHLAI
=====
HITS AT: 1-5

REFERENCE 1: 118:234486

REFERENCE 2: 115:174639

L35 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **97707-74-9** REGISTRY
CN Insulin (swine), 29B-[N6-(L-tyrosylglycylglycyl-L-phenylalanyl-L-leucyl)-L-
lysine]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60
,63,66,69,72,75,78,81,84,86-hexacosaazabicyclo[72.11.7]dononacontane,
cyclic peptide deriv.
CN Insulin (ox), 8A-L-threonine-10A-L-isoleucine-29B-[N6-[N-[N-[N-(N-L-
tyrosylglycyl)glycyl]-L-phenylalanyl]-L-leucyl]-L-lysine]-
NTE multichain

type	------ location ------		description
bridge	Cys-7	- Cys-7'	disulfide bridge
bridge	Cys-19	- Cys-20'	disulfide bridge
bridge	Lys-29	- Leu-5''	amide bridge
bridge	Cys-6'	- Cys-11'	disulfide bridge

SQL 56,30,21,5
RN **97707-74-9** REGISTRY
FS PROTEIN SEQUENCE
SQL 56,30,21,5

SEQ 1 GIVEQCCTSI CSLYQLENYC N
======
HITS AT: 13-18

REFERENCE 1: 103:81828

L35 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **87811-46-9** REGISTRY
CN L-Serine, N-[N-[N-(N-L-glutaminyl-L-alanyl)glycyl]-L-.alpha.-glutamyl]-(9CI) (CA INDEX NAME)
SQL **5**
RN **87811-46-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 QAGES
====
HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 99:195420

L35 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **87811-25-4** REGISTRY
CN L-Serine, N-[N-[N-[N-[N2-[(1,1-dimethylethoxy)carbonyl]-L-glutaminyl]-L-alanyl]glycyl]-L-.alpha.-glutamyl]-O-(phenylmethyl)-, 5-(phenylmethyl) ester (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gln-1	-	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Glu-4	-	phenylmethyl<Bzl>
modification	Ser-5	-	phenylmethyl<Bzl>

SQL **5**
RN **87811-25-4** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 QAGES
====
HITS AT: 1-4

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 99:195420

L35 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **84683-86-3** REGISTRY
CN Insulin (cattle), NA-(N-carboxy-L-methionyl)-NB-[[2-(methylsulfonyl)ethoxy]carbonyl]-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, (NA.fwdarw.4')-amide with N-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-tyrosyl-L-threonyl-L-prolyl-N6-L-methionyl-L-lysyl-L-alanine (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosaazabicyclo[72.11.7]dononacontane, cyclic peptide deriv.
CN Insulin (ox), NA-(N-carboxy-L-methionyl)-NB-[[2-(methylsulfonyl)ethoxy]carbonyl]-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, (NA.fwdarw.4')-amide with N-[[2-(methylsulfonyl)ethoxy]carbonyl]-L-tyrosyl-L-threonyl-L-prolyl-N6-L-methionyl-L-lysyl-L-alanine
NTE multichain

type	------ location ------		description
bridge	Cys-7	- Cys-8'	disulfide bridge
bridge	Cys-19	- Cys-21'	disulfide bridge
bridge	Met-1'	- Met-1'''	covalent bridge
bridge	Cys-7'	- Cys-12'	disulfide bridge
bridge	Lys-4''	- Met-1'''	amide bridge

SQL 53,25,22,5,1
RN **84683-86-3** REGISTRY
FS PROTEIN SEQUENCE
SQL 53,25,22,5,1

SEQ 1 MGIVEQCCAS VCSLYQLENY CN
======
HITS AT: 14-19

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 98:89861

L35 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2003 ACS
RN **84683-83-0** REGISTRY
CN Insulin (cattle), NA-(N-carboxy-L-methionyl)-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, (NA.fwdarw.4')-amide with L-tyrosyl-L-threonyl-L-prolyl-N6-L-methionyl-L-lysyl-L-alanine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosaazabicyclo[72.11.7]dononacontane, cyclic peptide deriv.
CN Insulin (ox), NA-(N-carboxy-L-methionyl)-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, (NA.fwdarw.4')-amide with L-tyrosyl-L-threonyl-L-prolyl-N6-L-methionyl-L-lysyl-L-alanine
NTE multichain

type	------ location ------		description
bridge	Cys-7	- Cys-8'	disulfide bridge
bridge	Cys-19	- Cys-21'	disulfide bridge
bridge	Met-1'	- Met-1'''	covalent bridge
bridge	Cys-7'	- Cys-12'	disulfide bridge
bridge	Lys-4''	- Met-1'''	amide bridge

SQL 53,25,22,5,1
RN **84683-83-0** REGISTRY
FS PROTEIN SEQUENCE
SQL 53,25,22,5,1

```
SEQ      1 MGIVEQCCAS VCSLYQLENY CN
                      ======
HITS AT:   14-19


**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  98:89861

L35  ANSWER 15 OF 15  REGISTRY  COPYRIGHT 2003 ACS
RN   80755-85-7  REGISTRY
CN   L-Valine, L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl- (9CI)  (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
CN   L-Valine, N-[N-[N-(N-L-glutaminyl-L-alanyl)glycyl]-L-.alpha.-aspartyl]-
OTHER NAMES:
CN   7: PN: DE10119096 PAGE: 10 claimed sequence
SQL  5
RN   80755-85-7  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  5

SEQ      1 QAGDV
           ====
HITS AT:   1-4

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  137:329502

REFERENCE   2:  111:21326

REFERENCE   3:  109:90296

REFERENCE   4:  109:35729

REFERENCE   5:  101:184048

REFERENCE   6:  100:136496

REFERENCE   7:  96:101574


=> d stat que l44
L1          1283 SEA FILE=REGISTRY ABB=ON  PLU=ON  ([HVLMI][GDEA][VENQILMD][FDPA
                 WYEG][NGQA]|[PQN][KR][NHQ][KRST][NEAQDGIL]|[KVMRIL][LIMV][LMIV]
                 [AVILMG][GEDA]|[VPRILMK][ATQSNG][PEAD][PGA][LEIMVD]|[LYIMVFW][L
                 IMV][NQ][KQRN][PFWY]/SQSP) AND SQL=<7
L2           843 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1
L3         15785 SEA FILE=REGISTRY ABB=ON  PLU=ON  PROTEIN(L)KINASE?
L4        134105 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR PROTEIN(5A)KINASE?
L6            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND L4
L7             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  US20020160478/PN OR WO20001889
                 5/PN
L8            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 NOT L7
L11        29068 SEA FILE=REGISTRY ABB=ON  PLU=ON  KINASE
L16       240660 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 OR KINASE
L17           44 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 AND L2
L18           25 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 NOT L8
L19           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND (?MODUL? OR ?REGULAT?
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```
                OR ?CONTOL? OR ?ACTIV?)
L21             6 SEA FILE=REGISTRY ABB=ON  PLU=ON  [LMIV][DTES][LIMV][MILV][NQ][
                  GA][GA][DE][LIMV][HRK][YFW]H[LIMV][SYTFW][QNH][HVLMI][GDEA][VEN
                  QILMD][FDPAYWEG][NGQA][PFWY][GA][FWY]/SQSP
L22             4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L21
L23            21 SEA FILE=REGISTRY ABB=ON  PLU=ON  [LMIV][DTES][LIMV][MILV][NQ]|
                  [DTES][LIMV][MILV][NQ][GA]|[LIMV][MILV][NQ][GA][GA]|[MILV][NQ][
                  GA][GA][DE]|[NQ][GA][GA][DE]/SQSP AND SQL=5
L24             2 SEA FILE=REGISTRY ABB=ON  PLU=ON  [GA][DE][LIMV][HRK][YFW]|[DE]
                  [LIMV][HRK][YFW]H|[LIMV][HRK][YFW]H[LIMV]|[HRK][YFW]H[LIMV][SYT
                  FW]|[YFW]H[LIMV][SYTFW][QNH]/SQSP AND SQL=5
L25             9 SEA FILE=REGISTRY ABB=ON  PLU=ON  H[LIMV][SYTFW][QNH][HVLMI]|[L
                  IMV][SYTFW][QNH][HVLMI][GDEA]|[SYTFW][QNH][HVLMI][GDEA][VENQILM
                  D]/SQSP AND SQL=5
L26           235 SEA FILE=REGISTRY ABB=ON  PLU=ON  [QNH][HVLMI][GDEA][VENQILMD][
                  FDPAYWEG]|[HVLMI][GDEA][VENQILMD][FDPAYWEG][NGQA]|[GDEA][VENQIL
                  MD][FDPAYWEG][NGQA][PFWY]/SQSP AND SQL=5
L27         30822 SEA FILE=REGISTRY ABB=ON  PLU=ON  [VENQILMD][FDPAYWEG][NGQA][PF
                  WY][GA]|[FDPAYWEG][NGQA][PFWY][GA][FWY]|[LIMV]|[GA][GA][DE][LIM
                  V][HRK]/SQSP AND SQL=5
L28            32 SEA FILE=REGISTRY ABB=ON  PLU=ON  L23 OR L24 OR L25
L29            32 SEA FILE=REGISTRY ABB=ON  PLU=ON  L28 NOT L21
L30            39 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L29
L31            39 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L30 NOT (L8 OR L7 OR L19 OR
                  L22)
L32             3 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND L16
L33            18 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L31 AND (?MODUL? OR ?REGULAT?
                  OR ?CONTOL? OR ?ACTIV?)
L34            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L32 OR L33
L36           209 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 AND L27
L37           233 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L36
L38           229 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 NOT (L8 OR L7 OR L19 OR
                  L22 OR L34)
L39             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L38 AND L16
L43            15 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L37 (L) (?MODUL? OR ?REGULAT?
                  OR ?CONTOL? OR ?ACTIV?)
L44            16 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L39 OR L43


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L44  ANSWER 1 OF 16  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:888908  HCAPLUS
DOCUMENT NUMBER:          137:380036
TITLE:                    Amyloid precursor protein- and amyloid precursor
                          protein-like protein-derived cytotoxic peptides and
                          peptidomimetics, and methods for modulating apoptosis
INVENTOR(S):              Bredesen, Dale
PATENT ASSIGNEE(S):       Buck Institute, USA
SOURCE:                   PCT Int. Appl., 48 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     WO 2002092788      A2   20021121       WO 2002-US9649    20020329
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
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CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-280515P P 20010330
US 2001-280615P P 20010330
US 2001-281050P P 20010402

AB .beta.-Amyloid precursor protein (APP) and two APP-like proteins (APLP1 and APLP2) are proteolytically cleaved by caspases in the C terminus to generate an approx. 31 amino acid peptide. It has been further discovered that the resultant C-terminal peptide is a potent inducer of apoptosis. Both caspase-cleaved APP and activated caspase-9 is present in brains of Alzheimer's disease patients but not in control brains. These findings indicate that caspase cleavage of APP and APP-like proteins leads to the generation of apoptotic peptides, which may contribute to the neuronal death assocd. with Alzheimer's disease. Accordingly, there are provided compns. and methods for modulating apoptosis.

IT **476274-23-4**
RL: PRP (Properties)
(unclaimed sequence; amyloid precursor protein- and amyloid precursor protein-like protein-derived cytotoxic peptides and peptidomimetics, and methods for **modulating** apoptosis)

L44 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:692600 HCAPLUS
DOCUMENT NUMBER: 138:121248
TITLE: Macrophage chemotactic response to elastin-derived VGVAPG and VGVPG permutations: A structure-activity relationship and receptor binding assay
AUTHOR(S): Briones, Maria Portia P.; Kamisato, Satsuki; Maeda, Iori; Takami, Noboru; Okamoto, Kouji
CORPORATE SOURCE: Department of Biochemical Engineering and Science, Kyushu Institute of Technology, Iizuka, Fukuoka, 820-8502, Japan
SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 807-808. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.
CODEN: 69DBAL; ISBN: 0-9715560-0-8
DOCUMENT TYPE: Conference
LANGUAGE: English

AB The potency of the hexapeptide VGVAPG and pentapeptide VGVPG permutations in inducing chemotaxis and identifying the receptor involved in the chemotaxis of macrophages was evaluated. It was also detd. whether VGVAPG could act as a ligand for the macrophage receptor, and the structure-activity relation involved in this biol. activity was analyzed. A chemotaxis assay demonstrated that 4 among the 6 hexapeptide permutations were chemoattractants for macrophages. Results of the deactivation test of the 4 potent hexapeptides suggested the existence of a single receptor for these hexapeptide permutations. The structural study of VGVAPG and VGVPG permutations using CD spectroscopy demonstrated that potent hexapeptides have no preference for structured conformations in the presence of phospholipid liposome dipalmitoyl-DL-.alpha.-phosphatidylcholine. The results do not suggest a clarified structural requirement for the chemotactic activity, hence further structural studies of these peptides in different lipid environments will be conducted.

IT **103584-76-5**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(macrophage chemotactic response to elastin-derived VGVAPG and VGVPG permutations: structure-**activity** relationship and receptor binding assay)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:676157 HCAPLUS
DOCUMENT NUMBER: 137:226599
TITLE: Small peptides capable of modulating the bioadhesion and signal transduction functions of CD66 (CEACAM) family members
INVENTOR(S): Skubitz, Keith M.; Skubitz, Amy P. N.
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002068601	A2	20020906	WO 2002-US5720	20020227

W: JP, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR
PRIORITY APPLN. INFO.: US 2001-272113P P 20010228
AB The present invention relates to peptides capable of modulating the function (e.g., signaling or adhesive activities) of CD66 (CEACAM) family members and/or their ligands. Specifically, a series of peptides derived from functional domains of CD66 antigens are used to modulate CD66-mediated cell adhesion or signal transduction.
IT **457858-35-4**
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(amino acid sequence, peptide **modulating** CD66 function; small peptides capable of **modulating** bioadhesion and signal transduction functions of CD66 (CEACAM) family members)

L44 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:783496 HCAPLUS
DOCUMENT NUMBER: 136:68554
TITLE: Antiviral activity and structural characteristics of the nonglycosylated central subdomain of human respiratory syncytial virus attachment (G) glycoprotein
AUTHOR(S): Gorman, Jeffrey J.; McKimm-Breschkin, Jennifer L.; Norton, Raymond S.; Barnham, Kevin J.
CORPORATE SOURCE: Biomolecular Research Institute, Parkville, 3052, Australia
SOURCE: Journal of Biological Chemistry (2001), 276(42), 38988-38994
CODEN: JBCHA3; ISSN: 0021-9258
PUBLISHER: American Society for Biochemistry and Molecular Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Segments of the cystine noose-contg. nonglycosylated central subdomain,

residues 149-197, of the attachment (G) glycoprotein of human respiratory syncytial virus (HRSV) have been assessed for impact on the cytopathic effect (CPE) of respiratory syncytial virus (RSV). N.alpha.-acetyl residues 149-197-amide (G149-197), G149-189, and G149-177 of the A2 strain of HRSV protected 50% of human epithelial HEp-2 cells from the CPE of the A2 strain at concns. (IC50) between 5 and 80 .mu.M. Cystine noose-contg. peptides G171-197 and G173-197 did not inhibit the CPE even at concns. above 150 .mu.M. Systematic C- and N-terminal truncations from G149-189 and G149-177 and alanine substitutions within G154-177 demonstrated that residues 166-170 (EVFNF), within a sequence that is conserved in HRSV strains, were crit. for inhibition. Concordantly, G154-177 of bovine RSV and of an antibody escape mutant of HRSV with residues 166-170 of QTLPY and EVSNP, resp., were not inhibitory. Surprisingly, a variant of G154-177 with an E166A substitution had an IC50 of 750 nM. NMR anal. demonstrated that G149-177 adopted a well-defined conformation in soln., clustered around F168 and F170. G154-170, particularly EVFNF, may be important in binding of RSV to host cells. These findings constitute a promising platform for the development of antiviral agents for RSV.

IT **383420-60-8**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antiviral **activity** and structural characteristics of the nonglycosylated central subdomain of human respiratory syncytial virus attachment (G) glycoprotein and inhibition by)

REFERENCE COUNT: 64 THERE ARE 64 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:311796 HCAPLUS
DOCUMENT NUMBER: 135:44052
TITLE: Comparison of chemotactic activity of macrophages induced by permutations of elastin-derived hexapeptide VGVAPG and pentapeptide VGVPG
AUTHOR(S): Briones, Maria Portia P.; Kozuru, Kyoko; Maeda, Iori; Kamisato, Satsuli; Takami, Noboru; Okamoto, Kouji
CORPORATE SOURCE: Department of Biochemical Engineering and Science, Kyushu Institute of Technology, Fukuoka, 820-8502, Japan
SOURCE: Peptide Science (2001), Volume Date 2000, 37th, 255-258
CODEN: PSCIFQ; ISSN: 1344-7661
PUBLISHER: Japanese Peptide Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The permutations of hexapeptide VGVAPG and pentapeptide VPGVG derived from elastin were evaluated and compared of their capacity to elicit chemotactic response in macrophages. Previous expt. revealed that four hexapeptide permutations namely VGVAPG, GVAPGV, VAPGVG and GVGVAP induced chemotactic activity. Present expt. showed that only one of the pentapeptide permutations, VGVPG stimulated chemotaxis in macrophages. Deactivation study implicates the possible involvement of a single receptor which recognizes both the chemotactic hexapeptide permutations and pentapeptide VGVPG.

IT **103584-76-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(comparison of chemotactic **activity** of macrophages induced by permutations of elastin-derived hexapeptide VGVAPG and pentapeptide VGVPG)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:83091 HCAPLUS

DOCUMENT NUMBER: 132:136407
TITLE: Peptides of human T cell reactive feline protein (TRFP)
INVENTOR(S): Gefter, Malcolm L.; Garman, Richard D.; Greenstein, Julia L.; Kuo, Mei-chang; Morville, Malcolm; Briner, Thomas J.
PATENT ASSIGNEE(S): Immulogic Pharmaceutical Corp., USA
SOURCE: U.S., 105 pp., Cont.-in-part of U.S. 5,547,669.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6019972	A	20000201	US 1994-300928	19940902
US 5547669	A	19960820	US 1991-807529	19911213
ZA 9302122	A	19950425	ZA 1993-2122	19930325
AU 9341026	A1	19941108	AU 1993-41026	19930414
AU 680820	B2	19970814		
EP 694067	A1	19960131	EP 1993-910592	19930414
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 09501043	T2	19970204	JP 1993-523074	19930414
US 6048962	A	20000411	US 1995-430014	19950427
US 6025162	A	20000215	US 1995-430944	19950428
US 6120769	A	20000919	US 1995-431184	19950428
FI 9504895	A	19951013	FI 1995-4895	19951013
NO 9504095	A	19951213	NO 1995-4095	19951013
FI 9603331	A	19960827	FI 1996-3331	19960827

PRIORITY APPLN. INFO.:
US 1989-431565 B2 19891103
US 1991-662276 B2 19910228
US 1991-807529 A2 19911213
US 1991-807529 A2 19911213
US 1992-857311 B2 19920325
US 1992-884718 B2 19920515
US 1993-6116 B2 19930115
WO 1993-US3471 W 19930414
US 1994-300928 A3 19940902
FI 1995-4895 A 19951013

AB A substantially pure, covalently linked human T cell reactive feline protein (TRFP) has been isolated from vacuum bag ext. obtained by affinity purifn. of house dust collected from several homes with cats; DNA encoding all or a portion of the TRFP or peptide; compns. contg. such a protein or peptide or portions thereof; and antibodies reactive with the TRFP or peptide are disclosed. Also disclosed are recombinant TRFP or peptide; modified or mutated TRFP peptides; their use for diagnostic or therapeutic purposes.

IT **256470-29-8**
RL: PRP (Properties)
(unclaimed sequence; peptides of human T cell **reactive** feline protein (TRFP))

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:784812 HCAPLUS
DOCUMENT NUMBER: 132:171032
TITLE: Photochemically immobilized polymer coatings: effects on protein adsorption, cell adhesion, and leukocyte activation
AUTHOR(S): Defife, Kristin M.; Hagen, Kris M.; Clapper, David L.; Anderson, James M.

CORPORATE SOURCE: Institute of Pathology, Case Western Reserve University, Cleveland, OH, 44106, USA
SOURCE: Journal of Biomaterials Science, Polymer Edition (1999), 10(10), 1063-1074
CODEN: JBSEEA; ISSN: 0920-5063
PUBLISHER: VSP BV
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Amphiphilic chains of 4-benzoylbenzoic acid moieties and polymer were photochem. immobilized onto silicone rubber to ask whether the covalently coupled polymers would passivate the silicone rubber by inhibiting protein adsorption and subsequent cell adhesion and activation. Three groups of polymers were utilized: the hydrophilic synthetic polymers of polyacrylamide, polyethylene glycol, and polyvinylpyrrolidone; the glycosaminoglycan, hyaluronic acid; and poly(glycine-valine-glycine-valine-proline), a polypeptide derived from the sequence of elastin. Each coating variant decreased the adsorption of fibrinogen and IgG compared to uncoated silicone rubber. All except the methoxy-polyethylene glycol coating nearly abolished fibroblast growth, but none of the coating variants inhibited monocyte or polymorphonuclear leukocyte adhesion. Interleukin-1.beta., interleukin-1 receptor antagonist, and tumor necrosis factor-.alpha. secretion by leukocytes were not statistically different between any of the coating variants and uncoated silicone rubber. However, the methoxy-polyethylene glycol and elastin-based polypeptide coatings, which supported the highest nos. of adherent monocytes, also elicited the lowest levels of proinflammatory cytokine secretion. When these in vitro data were collectively evaluated, the coating that most effectively passivated silicone rubber was the polypeptide derived from elastin.

IT **101992-07-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(photochem. immobilized polymer coatings effects on protein adsorption, cell adhesion, and leukocyte **activation**)

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:166744 HCAPLUS
DOCUMENT NUMBER: 130:219137
TITLE: Universal chloroplast integration and expression vectors, transformed plants and their products
INVENTOR(S): Daniell, Henry
PATENT ASSIGNEE(S): Auburn University, USA
SOURCE: PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9910513	A1	19990304	WO 1998-IB1199	19980805

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9884573	A1	19990316	AU 1998-84573	19980805
AU 748210	B2	20020530		
EP 1002115	A1	20000524	EP 1998-935230	19980805
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9815611	A	20020730	BR 1998-15611	19980805
JP 2002524023	T2	20020806	JP 2000-507821	19980805

PRIORITY APPLN. INFO.:

US 1997-55314P	P	19970807
US 1998-79042P	P	19980323
US 1998-79640	A	19980515
WO 1998-IB1199	W	19980805

AB The invention provides universal chloroplast integration and expression vectors which are competent to stably transform and integrate genes of interest into chloroplast genome of multiple species of plants. The vectors comprise a portion of the intergenic spacer 2 region between the tRNAI13 and the tRNA Ala genes of the chloroplast genome, whereby double homologous recombination with the conserved spacer 2 region in the target chloroplast genome is facilitated,. Transformed plants and their progeny are provided. Monocotyledonous and dicotyledonous plants are transformed which have never been transformed heretofore. Plants transformed with a synthetic gene express valuable biodegradable protein-based polymers (PBPs). Transformed plants produce high value mols. Resistance is provided to agricultural crops against the major classes of chem. herbicides. Herbicide resistance is used as a lethal selectable marker for chloroplast transformation. The transformed plants are capable of expressing in addn. to the targeted trait, a desirable, secondary non-targeted trait. Insect resistance is provided to transformed plants, both against insects that are susceptible to Bt toxins and against insects that have developed resistance to Bt toxins.

IT **101992-07-8P**
RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)
(expression of recombinant; universal chloroplast integration and expression vectors, transformed plants and their products)

IT **88361-67-5**
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)
(selectable phenotype is hygromycin resistance; universal chloroplast integration and expression vectors, transformed plants and their products)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	1998:440408 HCAPLUS
DOCUMENT NUMBER:	129:187343
TITLE:	Identification of elastin peptides with vasorelaxant activity on rat thoracic aorta
AUTHOR(S):	Lograno, M. D.; Bisaccia, F.; Ostuni, A.; Daniele, E.; Tamburro, A. M.
CORPORATE SOURCE:	Department of Pharmaco-Biology, University of Bari, Bari, Italy
SOURCE:	International Journal of Biochemistry & Cell Biology (1998), 30(4), 497-503 CODEN: IJBBFU; ISSN: 1357-2725
PUBLISHER:	Elsevier Science Ltd.
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB Elastin peptides obtained in vivo from the enzymic degrdn. of elastic fibers are present in the circulating human blood. In order to verify the role that these peptides may have in the regulation of the vascular tone, the activity of several peptides identified in the elastolytic digest of human elastin and some of their structural homologues has been tested.

Three of these peptides show a vasorelaxant activity in isolated rat aorta precontracted by phenylephrine. The activity obsd. is higher in the absence of the endothelium; in these conditions the IC50 for the peptides Val-Gly-Val-Ala-Pro-Gly, Val-Gly-Val-Pro-Gly and Val-Gly-Val-Hyp-Gly was 40 .+-. 2, 73 .+-. 2 and 10 .+-. 1 ng/mL, resp. They are active in the range of the pathol. circulating concn. and their role could be important in the regulation of vascular tone during several elastin degradative diseases.

IT **103584-76-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(identification of elastin peptides with vasorelaxant **activity** on rat thoracic aorta)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L44 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:504545 HCAPLUS
DOCUMENT NUMBER: 127:219499
TITLE: Structure-activity relationships for some elastin-derived peptide chemoattractants
AUTHOR(S): Morelli, M.A. Castiglione; Bisaccia, F.; Spisani, S.; De Biasi, M.; Traniello, S.; Tamburro, A. M.
CORPORATE SOURCE: Department of Chemistry, University of Basilicata, Potenza, Italy
SOURCE: Journal of Peptide Research (1997), 49(6), 492-499
CODEN: JPERFA; ISSN: 1397-002X
PUBLISHER: Munksgaard
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To explore the relationships between conformation of chemotactic peptides related to elastin and their biol. activity the authors have studied five peptides: VGVAPG, VGVPG, VGAPG, GVAPG and GGVPG in solvents of different polarities which may mimic the environmental conditions at the receptor site. CD and NMR studies showed that GVAPG has no preference for structured conformations, while the other peptides may assume folded conformations in org. solvents. All these peptides but GGVPG showed chemotactic activity for monocytes. The chemotactic activity of VGVPG, VGAPG and VGVAPG was inhibited by lactose, while chemotaxis of peptide GVAPG was insensitive to lactose, suggesting the existence of different chemotactic receptors.

IT **103584-76-5**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(structure-**activity** relationships for some elastin-derived peptide chemoattractants)

L44 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:714787 HCAPLUS
DOCUMENT NUMBER: 123:139514
TITLE: Stimulation of cell proliferation and autoregulation of elastin expression by elastin peptide VPGVG in cultured chick vascular smooth muscle cells
AUTHOR(S): Wachi, Hiroshi; Seyama, Yoshiyuki; Yamashita, Sabrou; Suganami, Hideki; Uemura, Yuko; Okamoto, Kouji; Yamada, Haruyoshi; Tajima, Shingo
CORPORATE SOURCE: Department of Clinical Chemistry, Hoshi College of Pharmacy, 2-4-41 Ebara, Shinagawa-ku, Tokyo, 142, Japan
SOURCE: FEBS Letters (1995), 368(2), 215-19
CODEN: FEBLAL; ISSN: 0014-5793
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal

LANGUAGE: English
AB Synthetic elastin peptides, VPGVG or its polymer (VPGVG)n, enhanced the proliferation of smooth muscle cells 1.5-fold during 48 h treatment at the concns. over 10-6 M or 1.0 .mu.g/mL, resp. Monomeric and polymeric VPGVG sequences reduced elastin synthesis and its mRNA level to one-third and one-half of control, resp., under the conditions in which the proliferation of cells was enhanced, but did not change collagen synthesis as measured by bacterial collagenase digestion. The elastin-specific autoregulation by elastin fragments may reflect the feedback regulation of elastin expression which may play an essential role in elastin metab. under the normal and diseased conditions.
IT **69289-41-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(elastin pentapeptide stimulation of cell proliferation and **autoregulation** of elastin expression in cultured chick vascular smooth muscle cells)

L44 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:145395 HCAPLUS
DOCUMENT NUMBER: 112:145395
TITLE: Anticancer agents coupled to N-(2-hydroxypropyl)methacrylamide copolymers. 3. Evaluation of adriamycin conjugates against mouse leukemia L1210 in vivo
AUTHOR(S): Duncan, Ruth; Hume, Isabella C.; Kopeckova, Pavla; Ulbrich, Karel; Strohalm, Jiri; Kopecek, Jindrich
CORPORATE SOURCE: Dep. Biol. Sci., Univ. Keele, Keele/Staffordshire, ST5 5BG, UK
SOURCE: Journal of Controlled Release (1989), 10(1), 51-63
CODEN: JCREEC; ISSN: 0168-3659
DOCUMENT TYPE: Journal
LANGUAGE: English
AB N-(2-Hydroxypropyl)methyacrylamide (HPMA) copolymers were synthesized contg. adriamycin (ADR) and in certain cases fucosylamine or galactosamine residues. Drug was attached to polymer via biodegradable (-Gly-Phe-Leu-Gly) or nonbiodegradable (-Gly-Gly) oligopeptide side-chains. Fucosylamine and galactosamine were included to promote conjugate targeting to L1210 cells and hepatocytes, resp. Although free ADR (5 mg/kg) can increase the mean life span of DBA2 mice bearing L1210 leukemia (up to 24%), animals do not survive beyond this time. Treatment with P-Gly-Phe-Leu-Gly-ADR (5 mg/kg) consistently increased mean survival time, and in addn. produced survivors at 50 days (up to 80% surviving). Polymers contg. in addn. galactosamine or fucosylamine were equally effective. Degrdn. of the drug-polymer linkage was a prerequisite for pharmacol. activity, P-Gly-Gly-ADR was totally ineffective. Conjugation of ADR limited toxicity, a >10 fold increase in dose could be given in the polymer-bound form without obvious ill effect. Measurement of the pharmacokinetics of 125I-labeled HPMA copolymer-ADR conjugates showed a marked alteration from the pattern of distribution reported previously for free ADR, and the levels of radioactivity detected in the heart were extremely low. The latter observation supports the obsd. decrease in toxicity seen for conjugated drug.
IT **125929-74-0DP**, conjugates with amino sugars and adriamycin
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and antileukemic **activity** of)

L44 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:217833 HCAPLUS
DOCUMENT NUMBER: 108:217833
TITLE: Entropic elastic processes in protein mechanisms. II.

Simple (passive) and coupled (active) development of elastic forces
AUTHOR(S): Urry, Dan W.
CORPORATE SOURCE: Lab. Mol. Biophys., Univ. Alabama, Birmingham, AL, 35294, USA
SOURCE: Journal of Protein Chemistry (1988), 7(2), 81-114
CODEN: JPCHD2; ISSN: 0277-8033
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English
AB A review with 100 refs. on entropic elastic processes in protein systems including muscle contraction, cell motility, connective tissue, and enzyme catalysis. Protein oxidn. and response to chem. modulation (i.e., pH, temp., phosphorylation, etc.) are discussed as mechanisms of elasticity loss and control, resp. Particular attention is given to elastic properties of elastin.
IT **69289-41-4**
RL: PRP (Properties)
(elastic properties of, chem. and thermal **modulation** of, entropic mechanism of protein elasticity in relation to)

L44 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:497101 HCAPLUS
DOCUMENT NUMBER: 107:97101
TITLE: Inhibitors of porcine pancreatic elastase. Peptides incorporating .alpha.-aza-amino acid residues in the P1 position
AUTHOR(S): Dutta, Anand S.; Giles, Michael B.; Williams, Joseph C.
CORPORATE SOURCE: Chem. Dep., Imp. Chem. Ind. PLC, Macclesfield/Cheshire, SK10 4TG, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1986), (9), 1655-64
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:97101
AB Title peptides based on elastin repeating sequence Gly-Val-Gly-Val-Ala were prepd. as inhibitors of porcine pancreatic elastase. Most of these peptides contain an .alpha.-aza-amino acid benzyl ester group at the C-terminus and an N-[(1-methoxycarbonylalkyl)carbamoyl] or an N-[(1-carboxyalkyl)carbamoyl] group at the N-terminus. The most potent analog of the series, N-[(1-carboxyethyl)carbamoyl]-valylglycyl-.alpha.-azaalanine benzyl ester was ca. 60-fold more potent than the azapeptide inhibitor of elastase (Ac-Ala-Ala-Azala-ONp) reported earlier.
IT **109953-01-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and elastase-inhibiting **activity** of)

L44 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:578622 HCAPLUS
DOCUMENT NUMBER: 103:178622
TITLE: Synthesis of Z- and TFA-pentapeptides and their ACE inhibitory tests
AUTHOR(S): Kayahara, Hiroshi; Tomida, Ichiro; Kurosawa, Shinichi
CORPORATE SOURCE: Dep. Agric. Chem., Shinshu Univ., Nagano, 399-45, Japan
SOURCE: Peptide Chemistry (1985), Volume Date 1984, 22nd, 49-52
CODEN: PECHDP; ISSN: 0388-3698
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Title pentapeptides R-X-X1-Phe-Ala-Pro-OH [R = PhCH2O2C (Z), CF3CO (Tfa);

X = Gly, Ala, Val, Ile, Phe; X1 = Val, Ile] were prepd. by conventional stepwise soln. methods and the angiotensin-converting enzyme (ACE) inhibitory activities were detd. for these peptides. The addn. of X to Z-X1-Phe-Ala-Pro-OH (X1 = Val, Ile) leads to a strong increase in potency, whereas the addn. of X to Tfa-X1-Phe-Ala-Pro-OH gives virtually the same high values in the potency as those of the corresponding parent tetrapeptides. The binding of Tfa peptides to ACE is discussed.

IT **98794-57-1P 98794-58-2P 98794-77-5P**
98794-78-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and angiotensin converting enzyme-inhibiting **activity** of)

IT **98794-47-9P 98794-48-0P 98794-67-3P**
98794-68-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and deblocking and angiotensin converting enzyme-inhibiting **activity** of)

L44 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:89861 HCAPLUS
DOCUMENT NUMBER: 98:89861
TITLE: Preparation and properties of crosslinked insulins containing a split peptide bond
AUTHOR(S): Wang, Chihchen; Chu, Shangchuan; Brandenburg, Dietrich; Wollmer, Axel
CORPORATE SOURCE: Inst. Biophys., Acad. Sin., Peking, Peop. Rep. China
SOURCE: Pept., Proc. Eur. Pept. Symp., 16th (1981), Meeting Date 1980, 389-94. Editor(s): Brunfeldt, K. Scriptor: Copenhagen, Den.
CODEN: 48NWA3
DOCUMENT TYPE: Conference
LANGUAGE: English

AB A1-B29-CMB-insulin (I, CMB = carbonylbismethionyl) was cleaved at the ArgB22-GlyB23 peptide bond by trypsin to give A1-B29-CMB-insulin with a split B22/23 bond. B1-Msc-DPI [Msc = MeSO2CH2CH2O2C, DPI = des-pentapeptide(B26-30)-insulin] was treated with CMB-(OC6H4NO2-p)2 and then coupled with Msc-Tyr-Thr-Pro-Lys-Ala-OH to give the protected insulin, which was deblocked to give A1-B29-CMB-insulin with a split B25/26 bond. The biol. activity of the split insulins are lower than that of I. The split insulins differ markedly from I in their CD spectrum; the split insulins have not kept the original conformation of I.

IT **84683-83-0P**
RL: SPN (Synthetic preparation); PREP (Preparation).
(prepn. and CD and biol. **activity** of)

=> select hit rn l44 1-15
E65 THROUGH E82 ASSIGNED

=> select hit rn l44 16
E83 THROUGH E83 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 10:56:36 ON 07 APR 2003
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```
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DICTIONARY FILE UPDATES:    6 APR 2003  HIGHEST RN 501901-52-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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  conducting SmartSELECT searches.

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Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
=>
=> d his l45

     (FILE 'HCAPLUS' ENTERED AT 10:54:35 ON 07 APR 2003)
               SELECT HIT RN L44 1-15
               SELECT HIT RN L44 16

     FILE 'REGISTRY' ENTERED AT 10:56:36 ON 07 APR 2003
L45           18 S E65-E83 AND (L26 OR L27)

=>
=>

=> d .seq l45 1-18

L45  ANSWER 1 OF 18  REGISTRY  COPYRIGHT 2003 ACS
RN   476274-23-4  REGISTRY
CN   L-Alanine, L-valyl-L-.alpha.-glutamyl-L-valyl-L-.alpha.-aspartyl- (9CI)
     (CA INDEX NAME)
OTHER NAMES:
CN   3: PN: WO02092788 SEQID: 8 unclaimed sequence
SQL  5
RN   476274-23-4  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  5

SEQ      1 VEVDA
           =====
HITS AT:   1-5

REFERENCE   1:  137:380036

L45  ANSWER 2 OF 18  REGISTRY  COPYRIGHT 2003 ACS
RN   457858-35-4  REGISTRY
CN   Glycine, L-asparaginyl-L-valyl-L-alanyl-L-.alpha.-glutamyl- (9CI)  (CA
     INDEX NAME)
OTHER NAMES:
CN   174: PN: WO02068601 SEQID: 174 claimed sequence
SQL  5
RN   457858-35-4  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  5

SEQ      1 NVAEG
           =====
HITS AT:   1-5
```

REFERENCE 1: 137:226599

L45 ANSWER 3 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **383420-60-8** REGISTRY
CN L-Phenylalanine, L-.alpha.-glutamyl-L-valyl-L-phenylalanyl-L-asparaginyl- (9CI) (CA INDEX NAME)
SQL **5**
RN **383420-60-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 EVFNF
=====
HITS AT: 1-5

REFERENCE 1: 136:68554

L45 ANSWER 4 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **256470-29-8** REGISTRY
CN L-Asparagine, L-valyl-L-alanyl-L-asparaginylglycyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 45: PN: US6019972 SEQID: 93 unclaimed sequence
SQL **5**
RN **256470-29-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 VANGN
=====
HITS AT: 1-5

REFERENCE 1: 132:136407

L45 ANSWER 5 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **125929-74-0** REGISTRY
CN Glycine, N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-alanyl-L-leucyl-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 2-Propenamide, N-(2-hydroxypropyl)-2-methyl-, polymer with N-[N-[N-[N-[N-(2-methyl-1-oxo-2-propenyl)glycyl]-L-phenylalanyl]-L-alanyl]-L-leucyl]glycine 4-nitrophenyl ester
CN 2-Propenamide, N-(2-hydroxypropyl)-2-methyl-, polymer with N-(2-methyl-1-oxo-2-propenyl)glycyl-L-phenylalanyl-L-alanyl-L-leucylglycine 4-nitrophenyl ester (9CI)
CN Glycine, N-[N-[N-[N-[N-(2-methyl-1-oxo-2-propenyl)glycyl]-L-phenylalanyl]-L-alanyl]-L-leucyl]-, 4-nitrophenyl ester, polymer with N-(2-hydroxypropyl)-2-methyl-2-propenamide
NTE homopolymer
modified (modifications unspecified)

type	location	description
modification	- -	undetermined modification
modification	Gly-1 -	2-methyl-1-oxo-2-propenyl

SQL **5**
RN **125929-74-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 GFALG
=====

HITS AT: 1-4, 3-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 GFALG
=====
HITS AT: 1-4, 3-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 GFALG
=====
HITS AT: 1-4, 3-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 131:303301

REFERENCE 2: 123:65663

REFERENCE 3: 112:145395

L45 ANSWER 6 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **109953-01-7** REGISTRY
CN L-Phenylalanine, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-valylglycyl-2-azaalanyl-, phenylmethyl ester (9CI) (CA INDEX NAME)
NTE modified

type	location		description
replacement	Ala-4	-	aza
modification	Gly-1	-	(1,1-dimethylethoxy) carbonyl<Boc>

SQL **5**
RN **109953-01-7** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 GVGAF
=====
HITS AT: 1-5

REFERENCE 1: 107:97101

L45 ANSWER 7 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **103584-76-5** REGISTRY
CN Glycine, L-valylglycyl-L-valyl-L-prolyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Glycine, N-[1-[N-(N-L-valylglycyl)-L-valyl]-L-prolyl]-
OTHER NAMES:
CN 23: PN: WO0028996 SEQID: 32 unclaimed sequence
SQL **5**
RN **103584-76-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 VGVPG
=====
HITS AT: 1-5

REFERENCE 1: 138:121248

REFERENCE 2: 136:11191

REFERENCE 3: 135:44052

REFERENCE 4: 134:3481

REFERENCE 5: 133:22140

REFERENCE 6: 131:219027

REFERENCE 7: 129:187343

REFERENCE 8: 127:219499

REFERENCE 9: 105:75348

L45 ANSWER 8 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **101992-07-8** REGISTRY
CN L-Proline, glycyl-L-valylglycyl-L-valyl-, homopolymer (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Proline, 1-[N-[N-(N-glycyl-L-valyl)glycyl]-L-valyl]-, homopolymer
NTE homopolymer
SQL **5**
RN **101992-07-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 GVGVP
=====
HITS AT: 1-2, 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 GVGVP
=====
HITS AT: 1-2, 2-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 137:165162

REFERENCE 2: 136:102978

REFERENCE 3: 135:227242

REFERENCE 4: 135:191797

REFERENCE 5: 135:93189

REFERENCE 6: 135:52907

REFERENCE 7: 134:267505

REFERENCE 8: 132:171032

REFERENCE 9: 132:166817

REFERENCE 10: 132:127652

L45 ANSWER 9 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-78-6** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-(trifluoroacetyl)-L-alanyl]-L-isoleucyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

type	------ location ------		description
modification	Ala-1	-	trifluoroacetyl<Tfa>

SQL 5
RN **98794-78-6** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 AIFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 10 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-77-5** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-(trifluoroacetyl)glycyl]-L-isoleucyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gly-1	-	trifluoroacetyl<Tfa>

SQL 5
RN **98794-77-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 GIFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 11 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-68-4** REGISTRY
CN L-Proline, 1-[N-[N-[N-[[(phenylmethoxy)carbonyl]-L-alanyl]-L-isoleucyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Ala-1	-	(phenylmethoxy)carbonyl<Z>

SQL 5
RN **98794-68-4** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 5

SEQ 1 AIFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 12 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-67-3** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-[(phenylmethoxy)carbonyl]glycyl]-L-isoleucyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gly-1	-	(phenylmethoxy)carbonyl<Z>

SQL **5**
RN **98794-67-3** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 GIFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 13 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-58-2** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-(trifluoroacetyl)-L-alanyl]-L-valyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Ala-1	-	trifluoroacetyl<Tfa>

SQL **5**
RN **98794-58-2** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 AVFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 14 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-57-1** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-(trifluoroacetyl)glycyl]-L-valyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gly-1	-	trifluoroacetyl<Tfa>

SQL **5**
RN **98794-57-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 GVFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 15 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-48-0** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-[(phenylmethoxy)carbonyl]-L-alanyl]-L-valyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Ala-1	-	(phenylmethoxy)carbonyl<Z>

SQL **5**
RN **98794-48-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 AVFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 16 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **98794-47-9** REGISTRY
CN L-Proline, 1-[N-[N-[N-[N-[(phenylmethoxy)carbonyl]glycyl]-L-valyl]-L-phenylalanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	Gly-1	-	(phenylmethoxy)carbonyl<Z>

SQL **5**
RN **98794-47-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 GVFAP
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 103:178622

L45 ANSWER 17 OF 18 REGISTRY COPYRIGHT 2003 ACS
RN **84683-83-0** REGISTRY
CN Insulin (cattle), NA-(N-carboxy-L-methionyl)-26B-de-L-tyrosine-27B-de-L-threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-, (NA.fwdarw.4')-amide with L-tyrosyl-L-threonyl-L-prolyl-N6-L-methionyl-L-lysyl-L-alanine (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3,4,44,45,90,91-Hexathia-8,11,14,17,20,23,26,29,32,35,38,41,48,51,54,57,60,63,66,69,72,75,78,81,84,86-hexacosaazabicyclo[72.11.7]dononacontane,

```
     cyclic peptide deriv.
CN   Insulin (ox), NA-(N-carboxy-L-methionyl)-26B-de-L-tyrosine-27B-de-L-
     threonine-28B-de-L-proline-29B-de-L-lysine-30B-de-L-alanine-,
     (NA.fwdarw.4')-amide with L-tyrosyl-L-threonyl-L-prolyl-N6-L-methionyl-L-
     lysyl-L-alanine
NTE  multichain
----------------------------------------------------------------------
 type            ------ location ------         description
----------------------------------------------------------------------
bridge           Cys-7       - Cys-8'      disulfide bridge
bridge           Cys-19      - Cys-21'     disulfide bridge
bridge           Met-1'      - Met-1'''    covalent bridge
bridge           Cys-7'      - Cys-12'     disulfide bridge
bridge           Lys-4''     - Met-1'''    amide bridge
----------------------------------------------------------------------
SQL  53,25,22,5,1
RN   84683-83-0  REGISTRY
FS   PROTEIN SEQUENCE
SQL  53,25,22,5,1

SEQ      1 FVNQHLCGSH LVEALYLVCG ERGFF
             =   =     ==  = ==
HITS AT:   2, 6, 11-12, 15, 17-18

SEQ      1 MGIVEQCCAS VCSLYQLENY CN
           = ==       =  = =====
HITS AT:   1, 3-4, 11, 14, 16-20


SEQ      1 M
           =
HITS AT:   1

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  98:89861

L45  ANSWER 18 OF 18  REGISTRY  COPYRIGHT 2003 ACS
RN   69289-41-4  REGISTRY
CN   Glycine, L-valyl-L-prolylglycyl-L-valyl-, homopolymer (9CI)  (CA INDEX
     NAME)
OTHER CA INDEX NAMES:
CN   Glycine, N-[N-[N-(1-L-valyl-L-prolyl)glycyl]-L-valyl]-, homopolymer
NTE  homopolymer
SQL  5
RN   69289-41-4  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  5

SEQ      1 VPGVG
           =  ==
HITS AT:   1-4, 1, 4-5

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

SEQ      1 VPGVG
           =  ==
HITS AT:   1-4, 1, 4-5

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  135:88809
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REFERENCE 2: 133:360185

REFERENCE 3: 133:248538

REFERENCE 4: 131:181312

REFERENCE 5: 124:335971

REFERENCE 6: 123:139514

REFERENCE 7: 119:66113

REFERENCE 8: 118:109827

REFERENCE 9: 117:251751

REFERENCE 10: 117:27122

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FILE LAST UPDATED: 6 Apr 2003  (20030406/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


=>
=>

=> d stat que l8
L1          1283 SEA FILE=REGISTRY ABB=ON  PLU=ON  ([HVLMI][GDEA][VENQILMD][FDPA
                 WYEG][NGQA]|[PQN][KR][NHQ][KRST][NEAQDGIL]|[KVMRIL][LIMV][LMIV]
                 [AVILMG][GEDA]|[VPRILMK][ATQSNG][PEAD][PGA][LEIMVD]|[LYIMVFW][L
                 IMV][NQ][KQRN][PFWY]/SQSP) AND SQL=<7
L2           843 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1
L3         15785 SEA FILE=REGISTRY ABB=ON  PLU=ON  PROTEIN(L)KINASE?
L4        134105 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR PROTEIN(5A)KINASE?
L6            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND L4
L7             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  US20020160478/PN OR WO20001889
                 5/PN
L8            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 NOT L7


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=>

=> d ibib abs hitrn l8 1-19

L8   ANSWER 1 OF 19  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:696145  HCAPLUS
DOCUMENT NUMBER:          137:227653
TITLE:                    Genetic engineering of dimorphic fungi for improved
                          secretion of recombinant proteins
INVENTOR(S):              Wolff, Anne Mette; Appel, Karen Fuglede; Petersen,
                          Jesper Breum; Poulsen, Ulla; Arnau, Jose; Jacobsen,
                          Mette Dorph
PATENT ASSIGNEE(S):       Bioteknologisk Institut, Den.
SOURCE:                   PCT Int. Appl., 296 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.       KIND  DATE           APPLICATION NO.   DATE
```

WO 2002070721	A2	20020912	WO 2002-DK157	20020308
WO 2002070721	A3	20021107		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DK 2001-395 A 20010308
US 2001-274650P P 20010312

AB It is an object of the present invention to provide fungal host organisms capable of expressing recombinant proteins while at the same time exhibiting satisfactory growth characteristics. It is a further object to provide in a single fungal host organism the characteristic of homogeneous growth and low viscosity typically assocd. with yeast organisms, and the capability for high protein secretion normally assocd. with filamentous fungi. It is yet a further object of the invention to provide useful tools for genetic anal. in zygomycetes, including dimorphic zygomycetes. Accordingly, the present invention relates to a recombinant, fungal cell or dimorphic fungal cell comprising regulatable expression of a regulator of morphol. Expression of the at least one regulator of morpol. directed by the expression signal not natively assocd. therewith results in a dimorphic shift of dimorphic fungal cell or a desirable, improved filamentation of a fungal cell or a dimorphic fungal cell. The improved filamentation of the fungal cell or the dimorphic fungal cell is pos. correlated with an increased prodn. and/or secretion of desirable polypeptide.

IT **459224-95-4 459224-97-6**
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(amino acid sequence; genetic engineering of dimorphic fungi for improved secretion of recombinant proteins)

IT **142243-02-5**, MAP kinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(dependent regulation of signal transduction in Mucor circinelloides; genetic engineering of dimorphic fungi for improved secretion of recombinant proteins)

IT **142008-29-5**, **Protein kinase** A
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
(gene pkaR and pkaC for, of Mucor circinelloides; genetic engineering of dimorphic fungi for improved secretion of recombinant proteins)

IT **459142-01-9**
RL: PRP (Properties)
(unclaimed sequence; genetic engineering of dimorphic fungi for improved secretion of recombinant proteins)

L8 ANSWER 2 OF 19 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:450006 HCAPLUS
DOCUMENT NUMBER: 137:30235
TITLE: Nucleic acid and polypeptides and their peptides as markers detectable by two-dimensional electrophoresis of brain tissue and their uses for diagnosis and treatment of Alzheimer's disease
INVENTOR(S): Herath, Herath Mudiyanselage Athula Chandrasiri; Parekh, Rajesh Bhikhu; Rohlff, Christian
PATENT ASSIGNEE(S): Oxford Glycosciences (UK) Ltd., UK
SOURCE: PCT Int. Appl., 427 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046767	A2	20020613	WO 2001-GB5289	20011129
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002022108	A5	20020618	AU 2002-22108	20011129
US 2003064411	A1	20030403	US 2001-14340	20011210

PRIORITY APPLN. INFO.: US 2000-254431P P 20001208
WO 2001-GB5289 W 20011129

AB The present invention provides methods and compns. for screening, diagnosis and prognosis of Alzheimer's disease, for monitoring the effectiveness of Alzheimer's disease treatment and for drug development. Alzheimer's disease-Assocd. Features (ADFs) detectable by two-dimensional electrophoresis of brain tissue are described. The invention further provides Alzheimer's disease-Assocd. Protein Isoforms (ADPIs) detectable in brain tissue, prepns. comprising isolated ADPIs, antibodies specific for ADPIs, and kits comprising the aforesaid. Thus proteins from a total of 37 brain tissue samples from subjects having Alzheimer's disease and 39 brain tissue samples from control subjects were sepd. by isoelec. focusing followed by SDS-PAGE and analyzed.

IT **436114-39-5**
RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic use); PRP (Properties); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(amino acid sequence; nucleic acid and polypeptides and their peptides as markers detectable by two-dimensional electrophoresis of brain tissue and their uses for diagnosis and treatment of Alzheimer's disease)

IT **137632-08-7**, ERK-2 kinase
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(screening assays; nucleic acid and polypeptides and their peptides as markers detectable by two-dimensional electrophoresis of brain tissue and their uses for diagnosis and treatment of Alzheimer's disease)

L8 ANSWER 3 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:172121 HCAPLUS
DOCUMENT NUMBER: 136:231255
TITLE: Nucleic acids encoding T-cell activation promoter and cytotoxic agent or cytokine for suppressing or enhancing T cell-mediated immune response
INVENTOR(S): Brenner, Sidney; Venkatesh, Byrappa; Tan, Yin Hwee
PATENT ASSIGNEE(S): Institute of Molecular & Cell Biology, Singapore; Ehrlich, Gal
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018619	A2	20020307	WO 2001-IL765	20010816

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001082458	A5	20020313	AU 2001-82458	20010816

PRIORITY APPLN. INFO.:
US 2000-229326P P 20000901
WO 2001-IL765 W 20010816

AB An isolated nucleic acid is disclosed, including a promoter sequence being transcriptionally functional in a T-lymphocyte undergoing activation and transcriptionally less functional in the T-lymphocyte prior to the activation. The nucleic acid constructs encode T cell activation promoter sequence and cytotoxic agent for suppressing T cell-mediated immune response and for treating immunol. disorders such as autoimmune diseases. The nucleic acid constructs may encode T cell activation promoter sequence and cytokine for enhancing T cell-mediated immune response and for treating diseases such as viral infection.

IT **403066-29-5P**
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; nucleic acids encoding T-cell activation promoter and cytotoxic agent or cytokine for suppressing or enhancing T cell-mediated immune response)

IT **114051-78-4**, Lck tyrosine kinase
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleic acids encoding T-cell activation promoter and cytotoxic agent or cytokine for suppressing or enhancing T cell-mediated immune response)

IT **402940-16-3**
RL: PRP (Properties)
(unclaimed sequence; nucleic acids encoding T-cell activation promoter and cytotoxic agent or cytokine for suppressing or enhancing T cell-mediated immune response)

L8 ANSWER 4 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:265595 HCAPLUS
DOCUMENT NUMBER: 134:309234
TITLE: A G protein-coupled receptor up-regulated in prostate cancer and its uses as a diagnostic and therapeutic target
INVENTOR(S): Raitano, Arthur B.; Afar, Daniel E. H.; Jakobovits, Aya; Faris, Mary; Hubert, Rene S.; Mitchell, Steve C.; Saffran, Douglas C.
PATENT ASSIGNEE(S): Urogenesys, Inc., USA
SOURCE: PCT Int. Appl., 140 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2001025434 A1 20010412 WO 2000-US27543 20001005
W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1220913 A1 20020710 EP 2000-967335 20001005
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL
JP 2003511029 T2 20030325 JP 2001-528586 20001005
PRIORITY APPLN. INFO.: US 1999-157902P P 19991005
WO 2000-US27543 W 20001005

AB A novel gene (designated PHOR-1) that is highly over-expressed in prostate and other cancers and its encoded protein are described. PHOR-1 is a G protein-coupled receptor with homol. to receptors involved in olfaction. PHOR-1 in normal human tissues is restricted to prostate, and this gene is highly over-expressed in prostate cancer as well as in cancers of the kidney, uterus, cervix, stomach and rectum. Consequently, PHOR-1 provides a diagnostic and/or therapeutic target for prostate cancer. The cDNA was first identified by suppression subtractive hybridization in a screen for transcripts up-regulated in androgen-dependent prostate cancer compared to the androgen-independent form. A primary clone that showed no homol. to known genes was used as a probe to obtain a full-length cDNA. The full-length cDNA was found to encode a G protein-coupled receptor similar to olfactory receptors. Gene expression is limited to normal prostate with some expression in the heart. The receptor plays a role in the regulation of phosphorylation in the prostate, including phosphorylation of the ERK1 kinase.

IT **137632-07-6**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(PHOR-1 receptor effects on phosphorylation in prostate; G protein-coupled receptor up-regulated in prostate cancer and its uses as diagnostic and therapeutic target)

IT **334774-52-6**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(peptide of PHOR1 receptor of human; G protein-coupled receptor up-regulated in prostate cancer and its uses as diagnostic and therapeutic target)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:15735 HCAPLUS
DOCUMENT NUMBER: 134:219168
TITLE: Analysis of isoaspartate in peptides by electrospray tandem mass spectrometry
AUTHOR(S): Lehmann, Wolf D.; Schlosser, Andreas; Erben, Gerhard; Pipkorn, Rudiger; Bossemeyer, Dirk; Kinzel, Volker
CORPORATE SOURCE: Central Spectroscopy Unit, German Cancer Research Center (DKFZ), Heidelberg, D-69120, Germany
SOURCE: Protein Science (2000), 9(11), 2260-2268
CODEN: PRCIEI; ISSN: 0961-8368
PUBLISHER: Cambridge University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In view of the significance of Asn deamidation and Asp isomerization to

isoAsp at certain sites for protein aging and turnover, it was desirable to challenge the extreme anal. power of electrospray tandem mass spectrometry (ESI-MS/MS) for the possibility of a site-specific detection of this posttranslational modification. For this purpose, synthetic L-Asp/L-isoAsp contg. oligopeptide pairs were investigated by ESI-MS/MS and low-energy collision-induced dissocn. (CID). Replacement of L-Asp by L-isoAsp resulted in the same kind of shifts for all 15 peptide pairs investigated: (1) the b/y intensity ratio of complementary b and y ions generated by cleavage of the (L-Asp/L-isoAsp)-X bond and of the X-(L-Asp/L-isoAsp) bond was decreased, and (2) the Asp immonium ion abundance at m/z 88 was also decreased. It is proposed that the isoAsp structure hampers the accepted mechanism of b-ion formation on both its N-and C-terminal side. The b/y ion intensity ratio and the relative immonium ion intensity vary considerably, depending on the peptide sequence, but the corresponding values are reproducible when recorded on the same instrument under identical instrumental settings. Thus, once the ref. product ion spectra have been documented for a pair of synthetic peptides contg. either L-Asp or L-isoAsp, these identify one or the other form. Characterization and relative quantification of L-Asp/L-isoAsp peptide mixts. are also possible as demonstrated for two sequences for which isoAsp formation has been described, namely myrG-D/isoD-AAAAK (deamidated peptide 1-7 of **protein kinase** A catalytic subunit) and VQ-D/isoD-GLR (deamidated peptide 41-46 of human procollagen alpha 1). Thus, the anal. procedures described may be helpful for the identification of suspected Asn deamidation and Asp isomerization sites in proteolytic digests of proteins.

IT **329272-09-5**
RL: AMX (Analytical matrix); ANST (Analytical study)
(isoaspartate detn. in peptides by electrospray tandem mass spectrometry)

REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:772677 HCAPLUS
DOCUMENT NUMBER: 133:349140
TITLE: Compositions and methods for cancer treatment by selectively inhibiting VEGF
INVENTOR(S): Thorpe, Philip E.; Brekken, Rolf A.
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 297 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000064946	A2	20001102	WO 2000-US11367	20000428
WO 2000064946	A3	20010215		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6342221	B1	20020129	US 2000-561108	20000428
US 6342219	B1	20020129	US 2000-561500	20000428
EP 1179541	A1	20020213	EP 2001-125821	20000428

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

EP 1185559	A2	20020313	EP 2000-930183	20000428
BR 2000010017	A	20020611	BR 2000-10017	20000428
US 6416758	B1	20020709	US 2000-561526	20000428
US 6524583	B1	20030225	US 2000-561499	20000428
US 2002119153	A1	20020829	US 2001-998831	20011130

PRIORITY APPLN. INFO.:
US 1999-131432P P 19990428
EP 2000-930183 A3 20000428
EP 2001-125821 A3 20000428
US 2000-561108 A1 20000428
WO 2000-US11367 W 20000428

AB Disclosed are antibodies that specifically inhibit VEGF binding to only one (VEGFR2) of the two VEGF receptors. The antibodies effectively inhibit angiogenesis and induce tumor regression, and yet have improved safety due to their specificity. The present invention thus provides new antibody-based compns., methods and combined protocols for treating cancer and other angiogenic diseases. Advantageous immunoconjugate and prodrug compns. and methods using the new VEGF-specific antibodies are also provided.

IT **178097-40-0DP**, immunoconjugates **178097-42-2DP**, immunoconjugates
RL: BPN (Biosynthetic preparation); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(amino acid sequence; immunoconjugates of anti-VEGF antibody for diagnosis and therapy of cancer and angiogenic disease)

IT **178038-65-8**
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(nucleotide sequence; immunoconjugates of anti-VEGF antibody for diagnosis and therapy of cancer and angiogenic disease)

IT **285552-08-1**
RL: PRP (Properties)
(unclaimed sequence; compns. and methods for cancer treatment by selectively inhibiting VEGF)

L8 ANSWER 7 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:641666 HCAPLUS
DOCUMENT NUMBER: 133:322118
TITLE: Semisynthesis of Ht31(493 - 515): involvement of PKA-anchoring proteins in the regulation of the cAMP-dependent chloride current in heart cells
AUTHOR(S): Cerovsky, Vaclav; Kockskamper, Jens; Glitsch, Helfried G.; Bordusa, Frank
CORPORATE SOURCE: Institute of Organic Chemistry and Biochemistry, Czech Academy of Sciences, Prague, 16610/6, Czech Rep.
SOURCE: ChemBioChem (2000), 1(2), 126-129
Published in: Angew. Chem., Int. Ed., 39(16)
CODEN: CBCHFX; ISSN: 1439-4227
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors describe the semisynthesis of a peptide (contg. the biol. active 493-515 sequence of human thyroid PKA-anchoring protein Ht31) using .alpha.-chymotrypsin-catalyzed peptide segment condensation. Biol. studies with the synthetic peptide, H-Asp493-Leu-Ile-Glu-Glu-Ala-Ala-Ser-Arg-Ile-Val-Asp-Ala-Val-Ile-Glu-Gln-Val-Lys-Ala-Ala-Gly-Ala515-Tyr-OH, revealed new findings about the PKA-dependent regulation of ion channels in mammalian heart cells.

IT **142008-29-5**, **Protein kinase** A
RL: BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL

(Biological study)
(semisynthesis of (493-515)-peptide sequence of human thyroid PKA-anchoring protein Ht31)
IT **303070-41-9D**, resin-bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(semisynthesis of (493-515)-peptide sequence of human thyroid PKA-anchoring protein Ht31)
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:421158 HCAPLUS
DOCUMENT NUMBER: 133:54549
TITLE: Cloning and cDNA and deduced amino acid sequences of 47 human secreted proteins
INVENTOR(S): Ruben, Steven M.; Ebner, Reinhard; Rosen, Craig A.; Endress, Gregory A.; Soppet, Daniel R.; Ni, Jian; Duan, D. Roxanne; Moore, Paul A.; Shi, Yanggu; Lafleur, David W.; Olsen, Henrik S.; Florence, Kimberly
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA; et al.
SOURCE: PCT Int. Appl., 562 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000035937	A1	20000622	WO 1999-US29950	19991216
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140970	A1	20011010	EP 1999-965291	19991216
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002532083	T2	20021002	JP 2000-588195	19991216

PRIORITY APPLN. INFO.: US 1998-112809P P 19981217
US 1998-113006P P 19981218
WO 1999-US29950 W 19991216

AB The present invention relates to 47 novel human secreted proteins and isolated nucleic acids contg. the coding regions of the genes encoding such proteins. Tissue distribution, sequence homologies, and preferred epitope sites are provided for the secreted proteins, as well as chromosomal mapping of some of the genes. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human secreted proteins in bacterial, insect, and mammalian cells. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating disorders related to these novel human secreted proteins. High-throughput screening assays are also provided for various putative activities of the secreted proteins.
IT **161384-16-3**, JAK kinase
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(Jaks-STAT pathway for high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 47 human secreted proteins)

IT **80449-02-1, Protein tyrosine kinase**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(high-throughput screening assays; cloning and cDNA and deduced amino acid sequences of 47 human secreted proteins)
IT **277306-75-9**
RL: PRP (Properties)
(unclaimed sequence; cloning and cDNA and deduced amino acid sequences of 47 human secreted proteins)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:240985 HCAPLUS
DOCUMENT NUMBER: 132:292701
TITLE: Novel methods for therapeutic vaccination
INVENTOR(S): Steinaa, Lucilla; Mouritsen, Soren; Nielsen, Klaus Gregorious; Haaning, Jesper; Leach, Dana; Dalum, Iben; Gautam, Anand; Birk, Peter; Karlsson, Gunilla
PATENT ASSIGNEE(S): M Amp E Biotech A/s, Den.
SOURCE: PCT Int. Appl., 220 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000020027	A2	20000413	WO 1999-DK525	19991005
WO 2000020027	A3	20001012		
W: AE, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2345817	AA	20000413	CA 1999-2345817	19991005
AU 9958510	A1	20000426	AU 1999-58510	19991005
AU 751709	B2	20020822		
EP 1117421	A2	20010725	EP 1999-945967	19991005
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI, LT, LV, FI, RO				
JP 2002526419	T2	20020820	JP 2000-573386	19991005
EE 200100203	A	20021015	EE 2001-20010020319991005	
NO 2001001586	A	20010531	NO 2001-1586	20010328

PRIORITY APPLN. INFO.:
DK 1998-1261 A 19981005
US 1998-105011P P 19981020
WO 1999-DK525 W 19991005

AB A method is disclosed for inducing cell-mediated immunity against cellular antigens. More specifically, the invention provides for a method for inducing cytotoxic T-lymphocyte immunity against weak antigens, notably self-proteins. The method entails that antigen presenting cells are induced to present at least one CTL epitope of the weak antigen and at the same time presenting at least one foreign T-helper lymphocyte epitope. In a preferred embodiment, the antigen is a cancer specific antigen, e.g. prostate specific membrane antigen (PSM), Her2, or FGF8b. The method can be exercised by using traditional polypeptide vaccination, but also by using live attenuated vaccines or nucleic acid vaccination. The invention furthermore provides immunogenic analogs of PSM, Her2 and FGF8b, as well

as nucleic acid mols. encoding these analogs. Also vectors and transformed cells are disclosed. The invention also provides for a method for identification of immunogenic analogs of weak or non-immunogenic antigens.

IT **147014-97-9**, Cyclin-dependent kinase 4
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(weak antigens inserted with foreign T cell epitope as vaccines)

IT **264626-84-8**, Human FGF8b protein (85-91)
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(weak antigens inserted with foreign T cell epitope as vaccines)

L8 ANSWER 10 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:207381 HCAPLUS
DOCUMENT NUMBER: 133:12934
TITLE: Molecular pharmacology of human vasopressin receptors
AUTHOR(S): Thibonnier, Marc; Conarty, Doreen M.; Preston, Judith A.; Wilkins, Pamela L.; Berti-Mattera, Liliana N.; Mattera, Rafael
CORPORATE SOURCE: Division of Clinical and Molecular Endocrinology, Department of Medicine, Case Western Reserve University School of Medicine, Cleveland, OH, 44106-4951, USA
SOURCE: Advances in Experimental Medicine and Biology (1998), 449(Vasopressin and Oxytocin), 251-276
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Vasopressin (AVP) and oxytocin (OT) are cyclic nonapeptides whose actions are mediated by activation of specific G protein-coupled receptors (GPCRs) currently classified into V1-vascular (V1R), V2-renal (V2R) and V3-pituitary (V3R) AVP receptors and OT receptors (OTR). The cloning of the different members of the AVP/OT family of receptors now allows the extensive mol. pharmacol. characterization of a single AVP/OT receptor subtype in stably transfected mammalian cell lines. The human V1-vascular (CHO-V1), V2-renal (CHO-V2), V3-pituitary (CHO-V3) and oxytocin (CHO-OT) receptors stably expressed in CHO cells display distinct binding profiles for 18 peptide and 5 nonpeptide AVP/OT analogs. Several peptide and nonpeptide compds. have a greater affinity for the V1R than AVP itself. V2R peptide agonists and antagonists tend to be non-selective ligands, whereas nonpeptide V2R antagonists are potent and subtype-selective. None of the 22 AVP/OT analogs tested has a better affinity for the human V3R than AVP itself. Several peptide antagonists do not select well between V1R and OTR. These results underscore the need for developing specific and potent analogs interacting specifically with a given human AVP/OT receptor subtype. The authors measured thymidine uptake as an index of mitogenic activity elicited by activation of a given AVP/OT receptor subtype. Stimulation of V1Rs, V3Rs by AVP as well as OTRs by OT produces a dose-dependent mitogenic response, whereas AVP occupancy of V2Rs leads to an anti-mitogenic response. For similar levels of expression of receptors, the mitogenic efficacy is ranked as follows: V1Rs > V3Rs > OTRs. Deletion of the C-terminus of the human V1R which contains four PKC phosphorylation sites abolishes the mitogenic effect of AVP. The authors directly measured AVP- or OT-stimulated formation of cAMP in CHO-V1, CHO-V2, CHO-V3, and CHO-OT cells and the results suggest that only the AVP/OT receptor subtypes which do not stimulate cAMP prodn. (V1R, V3Rs, and OTRs) increase thymidine uptake. The mitogen-activated **protein kinases** (MAPKs) are a point of convergence for mitogenic signals triggered by several classes of cell surface receptors including the GPCRs. AVP-dependent activation of MAPKs was examd. in CHO cells transfected with the various AVP receptor subtypes. Activation of

all AVP receptor subtypes produces a dose-dependent phosphorylation of p42 and p44 MAPKs which peaked at 10 min, started to decay slowly afterwards in all cell types, but lasted for at least 2 h. Since the various AVP receptor subtypes show a differential G **protein** coupling profile, stimulation of MAP **kinase** phosphorylation by the various types of AVP receptors suggests that different pathways are involved in the process. In CHO-V3 cells stably expressing low, medium or high levels of human V3Rs (Bmax: <10 pmol/mg, 10 to 25 pmol/mg, and 25 to 100 pmol/mg, resp.), AVP stimulation of phospholipase C, phospholipase A2, [3H]thymidine uptake, cAMP prodn., MAP kinases phosphorylation was a function of the receptor d. The V3R activates several signaling pathways via different G proteins, depending on the level of receptor expression. The increased synthesis of DNA and cAMP levels obsd. in cells expressing medium and high levels of V3Rs, resp., may represent important events in the tumorigenesis of corticotroph cells.

IT **129520-69-0 137632-07-6 137632-07-6**, p44 Mitogen-activated **protein kinase 137632-08-7**, p42 Mitogen-activated **protein kinase 137632-08-7 141436-78-4**, **Protein kinase** C **142805-58-1**, Mek **197847-26-0**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(ligand binding profile, mitogenic effect and activation of kinase pathways by humans vasopressin-oxytocin receptor subtypes expressed in mammalian cells)

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:766507 HCAPLUS
DOCUMENT NUMBER: 130:29221
TITLE: Preparation of solid porous matrixes for pharmaceutical uses
INVENTOR(S): Unger, Evan C.
PATENT ASSIGNEE(S): ImaRx Pharmaceutical Corp., USA
SOURCE: PCT Int. Appl., 139 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 6
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851282	A1	19981119	WO 1998-US9570	19980512
W: AU, BR, CA, CN, JP, KR, NZ				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 2002039594	A1	20020404	US 1998-75477	19980511
AU 9873787	A1	19981208	AU 1998-73787	19980512
EP 983060	A1	20000308	EP 1998-921109	19980512
R: DE, FR, GB, IT, NL				
US 2001018072	A1	20010830	US 2001-828762	20010409

PRIORITY APPLN. INFO.: US 1997-46379P P 19970513
US 1998-75477 A 19980511
WO 1998-US9570 W 19980512

AB A solid porous matrix formed from a surfactant, a solvent, and a bioactive agent is described. Thus, amphotericin nanoparticles were prepd. by using ZrO2 beads and a surfactant. The mixt. was milled for 24 h.

IT **80755-87-9 141436-78-4**, **Protein kinase** c
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of solid porous matrixes for pharmaceutical uses)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 12 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:560371 HCAPLUS
DOCUMENT NUMBER: 129:274397
TITLE: Identification of a proline-rich sequence in the CD2 cytoplasmic domain critical for regulation of integrin-mediated adhesion and activation of phosphoinositide 3-kinase
AUTHOR(S): Kivens, Wendy J.; Hunt, Stephen W., III.; Mobley, James L.; Zell, Traci; Dell, Cheryl L.; Bierer, Barbara E.; Shimizu, Yoji
CORPORATE SOURCE: Department of Laboratory Medicine and Pathology, Center for Immunology, University of Minnesota Medical School, Minneapolis, MN, 55455, USA
SOURCE: Molecular and Cellular Biology (1998), 18(9), 5291-5307
CODEN: MCEBD4; ISSN: 0270-7306
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The CD2 mol. is one of several lymphocyte receptors that rapidly initiates signaling events regulating integrin-mediated cell adhesion. CD2 stimulation of resting human T cells results within minutes in an increase in .beta.1-integrin-mediated adhesion to fibronectin. The authors utilized the HL60 cell line to map crit. residues within the CD2 cytoplasmic domain involved in CD2 regulation of integrin function. A panel of CD2 cytoplasmic domain mutants was constructed and analyzed for their ability to upregulate integrin-mediated adhesion to fibronectin. Mutations in the CD2 cytoplasmic domain implicated in CD2-mediated interleukin-2 prodn. or CD2 avidity do not affect CD2 regulation of integrin activity. A proline-rich sequence, KGPPLP (amino acids 299-305), is essential for CD2-mediated regulation of .beta.1 integrin activity. CD2-induced increases in .beta.1 integrin activity could be blocked by 2 phosphoinositide 3-kinase (PI 3-K) inhibitors or by overexpression of a dominant neg. form of the p85 subunit of PI 3-K. In addn., CD2 cytoplasmic domain mutations that abrogate CD2-induced increases in integrin-mediated adhesion also ablate CD2-induced increases in PI 3-K enzymic activity. Surprisingly, CD2 cytoplasmic domain mutations that inhibit CD2 regulation of adhesion do not affect the constitutive assocn. of the p85 subunit of PI 3-K assocn. with CD2. Mutation of the proline residues in the KGPPLP motif to alanines prevented CD2-mediated activation of integrin function and PI 3-K activity but not mitogen-activated **protein** (MAP) **kinase** activity. Furthermore, the MEK inhibitor PD 098059 blocked CD2-mediated activation of MAP kinase but had no effect on CD2-induced adhesion. These studies identify a proline-rich sequence in CD2 crit. for PI 3-K-dependent regulation of .beta.1 integrin adhesion by CD2. In addn., the studies suggest that CD2-mediated activation of MAP kinase is not involved in CD2 regulation of integrin adhesion.
IT **213979-76-1**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); OCCU (Occurrence)
(proline-rich sequence in CD2 cytoplasmic domain involved in phosphoinositide 3-kinase-dependent regulation of integrin-mediated adhesion by human T cells)
REFERENCE COUNT: 91 THERE ARE 91 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:641368 HCAPLUS
DOCUMENT NUMBER: 127:326735

TITLE: The human V3 pituitary vasopressin receptor: ligand binding profile and density-dependent signaling pathways

AUTHOR(S): Thibonnier, Marc; Preston, Judy A.; Dulin, Nickolai; Wilkins, Pamela L.; Berti-Mattera, Liliana N.; Mattera, Rafael

CORPORATE SOURCE: Departments Medicine Physiology, Case Western Reserve University School Medicine and University Hospitals Cleveland, Cleveland, OH, 44106-4951, USA

SOURCE: Endocrinology (1997), 138(10), 4109-4122
CODEN: ENDOAO; ISSN: 0013-7227

PUBLISHER: Endocrine Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The vasopressin (AVP) V3 pituitary receptor (V3R) is a G protein-coupled corticotropic phenotypic marker that is overexpressed in ACTH-hypersecreting tumors. Studies of the agonist/antagonist binding profile and signal transduction pathways linked to the human V3R have been limited because of the scarcity of this protein. To define the signals activated by V3Rs and the eventual changes triggered by developmental or pathol. receptor regulation, the authors developed Chinese hamster ovary (CHO)-V3 cells stably expressing low, medium, or high levels of human V3Rs (binding capacity, <10, 10-25, and 25-100 pmol/mg, resp.). The affinity of the V3R for 21 peptide and nonpeptide AVP analogs was clearly distinct from that exhibited by the human V1R and V2R. AVP triggered stimulation of phospholipase C in CHO-V3 cells (partially sensitive to treatment with pertussis toxin) with a potency directly proportional to receptor d. V3R-mediated arachidonic acid release also was also sensitive to pertussis toxin and more efficacious in cells exhibiting medium than in those with high receptor d. AVP also stimulated the pertussis toxin-insensitive uptake of [3H]thymidine in CHO-V3 cells. The concn.-response curves for this effect were monophasic in cells expressing low and medium levels of V3Rs; on the contrary, a biphasic curve was obsd. in cells with high V3R d. Coupling of V3R to increased prodn. of cAMP was only obsd. in CHOV3 high cells, suggesting a neg. relationship between increased cAMP prodn. and DNA synthesis. Activation of mitogen-activated **protein kinases** by V3R was pertussis toxin insensitive, but was dependent on activation of phospholipase C and **protein kinase** C; both the level and duration of activation were a function of the receptor d. Thus, the human V3R has a pharmacol. profile clearly distinct from that of the human V1R and V2R and activates several signaling pathways via different G proteins, depending on the level of receptor expression. The increased synthesis of DNA and cAMP levels obsd. in cells expressing medium and high levels of V3Rs, resp., may represent important events in the tumorigenesis of corticotroph cells.

IT **137632-07-6**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(human V3 pituitary vasopressin receptor with ligand binding profile and d.-dependent signaling pathways)

IT **129520-69-0 137632-08-7**, p42 MAP kinase **142243-02-5**, MAP kinase **197847-26-0**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(the human V3 pituitary vasopressin receptor with ligand binding profile and d.-dependent signaling pathways)

IT **141436-78-4**, **Protein kinase** C
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(the human V3 pituitary vasopressin receptor with ligand binding profile and d.-dependent signaling pathways)

L8 ANSWER 14 OF 19 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1996:695936 HCAPLUS
DOCUMENT NUMBER: 126:29489
TITLE: Elastin peptides induce monocyte chemotaxis by increasing the level of cyclic GMP, an intracellular second messenger
AUTHOR(S): Uemura, Y.; Kamisato, S.; Arima, K.; Takami, N.; Okamoto, K.
CORPORATE SOURCE: Department Biochemical Engineering and Science, Kyushu Institute Technology, Iizuka, 820, Japan
SOURCE: Peptides: Chemistry, Structure and Biology, Proceedings of the American Peptide Symposium, 14th, Columbus, Ohio, June 18-23, 1995 (1996), Meeting Date 1995, 412-413. Editor(s): Kaumaya, Pravin T. P.; Hodges, Robert S. Mayflower Scientific: Kingswinford, UK.
CODEN: 63NTAF
DOCUMENT TYPE: Conference
LANGUAGE: English

AB The chemotactic potency of repeating elastin peptides and .alpha.-elastin (chem. treated fragments of elastin) was studied. The pos. migration of monocytes in response to a concn. gradient ranging from 10-4 to 104 .mu.g/mL showed that maximal activities were at 0.1 .mu.g/mL and 1 .mu.g/mL for .alpha.-elastin and the high polymer of hexapeptide repeat, (VGVAPG)n, resp. In contrast, the high polymer of pentapeptide repeat, (VPGVG)n, was not chemotactic for monocytes. KT5823, an inhibitor specific for cGMP dependent kinase (PKG), inhibited monocyte migration to .alpha.-elastin and (VGVAPG)n in a dose-dependent manner. However, KT5823 had no inhibitory effect toward FMLP-induced monocyte migration. These results suggest that elastin peptides induce monocyte chemotaxis by increasing the level of cGMP through a signal transduction pathway distinct from that of FMLP.

IT **184705-76-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(elastin peptides induce monocyte chemotaxis by increasing level of cyclic GMP)

IT **141588-27-4**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(elastin peptides induce monocyte chemotaxis by increasing level of cyclic GMP)

L8 ANSWER 15 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:558037 HCAPLUS
DOCUMENT NUMBER: 119:158037
TITLE: Leukocyte response integrin and integrin-associated protein act as a signal transduction unit in generation of a phagocyte respiratory burst
AUTHOR(S): Zhou, Mingjie; Brown, Eric J.
CORPORATE SOURCE: Dep. Med., Washington Univ., St. Louis, MO, 63110, USA
SOURCE: Journal of Experimental Medicine (1993), 178(4), 1165-74
CODEN: JEMEAV; ISSN: 0022-1007
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The leukocyte response integrin (LRI) is a phagocyte integrin which recognizes the basement membrane protein entactin and the synthetic peptide Lys-Gly-Ala-Gly-Asp-Val (KGAGDV). The function of LRI is intimately assocd. with that of a distinct membrane protein, integrin-assocd. protein (IAP), as antibodies which recognizes IAP can inhibit all known functions of LRI. When adherent to a surface, the LRI ligands entactin and KGAGDV activate the respiratory burst in polymorphonuclear leukocytes (PMN) and monocytes, as do monoclonal

antibodies (mAb) directed at either LRI or IAP. When added in soln., peptides and antibodies specific for LRI, and some, but not all, anti-IAP antibodies, can inhibit the respiratory burst activated by any of these surface-adherent ligands. Only monoclonal anti-IAP antibodies which can inhibit LRI function when added in soln. are competent to activate the respiratory burst when adherent to a surface. KGAGDV peptide and anti-LRI added in soln. can inhibit anti-IAP-stimulated respiratory burst. The LRI-IAP-initiated respiratory burst is independent of CD18, as judged by: (a) blockade of inhibition by anti-CD18 mAb with the **protein kinase** A inhibitor HA1004; (b) enhanced sensitivity of CD18-dependent respiratory burst compared with LRI/IAP-dependent respiratory burst to the tyrosine kinase inhibitors genistein and herbimycin; and (c) generation of a respiratory burst in response to KGAGDV, anti-LRI, and anti-IAP coated surfaces in PMN from a patient with LAD. Despite its apparent CD18 independence, LRI/IAP-initiated respiratory burst requires a solid phase ligand and is sensitive to cytochalasin B. These data suggest a model in which LRI and IAP act together as a single signal transduction unit to activate the phagocyte respiratory burst, in a manner that requires CD18-independent cell adhesion.

IT **143380-45-4**
RL: BIOL (Biological study)
(leukocyte response integrin recognizing, integrin-assocd. protein interaction with, as signal transduction unit in phagocyte respiratory burst)

L8 ANSWER 16 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:626377 HCAPLUS
DOCUMENT NUMBER: 115:226377
TITLE: Phosphorylation and dephosphorylation modulation of an inverse temperature transition
AUTHOR(S): Pattanaik, Asima; Gowda, D. Channe; Urry, Dan W.
CORPORATE SOURCE: Sch. Med., Univ. Alabama, Birmingham, AL, 35294-0019, USA
SOURCE: Biochemical and Biophysical Research Communications (1991), 178(2), 539-45
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Poly[15(IPGVG),(RGYSLG)], where RGYSLG is a **protein kinase** site, was synthesized. On raising the temp. of a 5 mg/mL soln., this polypeptide undergoes and inverse temp. transition at 18.degree. in which it folds into a contracted state by optimizing intramol. hydrophobic interactions. Averaging the data of five expts., phosphorylation by means of a 3':5' cAMP dependent **protein kinase** to the extent of one phosphate in 360 residues raises the temp. of the folding transition to 32.degree.. The shift is completely reversed on dephosphorylation by alk. phosphatase. Phosphorylation is the most potent chem. perturbation known for shifting the temp. of an inverse temp. transition, which is an efficient mechanism for achieving chemomech. transduction (mechanochem. coupling).

IT **9026-43-1, Protein kinase**
RL: BIOL (Biological study)
(cAMP-dependent, elastic **protein** phosphorylation by, inverse transition response to)

IT **137147-52-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and phosphorylation effect on inverse temp. transition of)

L8 ANSWER 17 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1988:127574 HCAPLUS
DOCUMENT NUMBER: 108:127574
TITLE: Synthetic peptide analogs differentially alter the

binding affinities of cyclic nucleotide-dependent **protein kinases** for nucleotide substrates

AUTHOR(S): Bhatnagar, Deepak; Glass, David B.; Roskoski, Robert, Jr.; Lessor, Ralph A.; Leonard, Nelson J.

CORPORATE SOURCE: South. Reg. Res. Cent., U.S. Dep. Agric., New Orleans, LA, 70179, USA

SOURCE: Biochemistry (1988), 27(6), 1988-94
CODEN: BICHAW; ISSN: 0006-2960

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Analogs of a synthetic heptapeptide substrate corresponding to the sequence around a phosphorylation site in histone H2B were used to assess interactions between the peptide substrate and the ATP binding sites of cGMP-dependent **protein kinase** and the catalytic subunit of cAMP-dependent **protein kinase**. The affinity of each **protein kinase** for lin-benzo-ADP was detd. in the absence and presence of substrate peptide by fluorescence anisotropy titrns. The dissocn. const. (Kd) values of cGMP-dependent **protein kinase** for lin-benzo-ADP in the absence and presence of cGMP were 7.6 and 9.7 .mu.M, resp. Histone H2B(29-35) (Arg-Lys-Arg-Ser-Arg-Lys-Glu) had no effect on nucleotide affinity in either the absence or presence of cGMP. However, when lysine-34, which is located 2 residues after the phosphorylatable serine-32, is replaced with an alanyl residue, the resulting [Ala34]histone H2B(29-35) and its analog peptides interacted with cGMP-dependent **protein kinase** and/or the nucleotide in a fashion that decreased nucleotide binding affinity .apprx.3-fold. This amino acid replacement was previously shown to increase the Vmax and decrease the pH optimum for the phosphotransferase reaction. The replacement of pos. charged residues at positions 30 and 31 of the peptide also decreased the nucleotide affinity. Other analogs of histone H2B(29-35) failed to affect binding of lin-benzo-ADP to the active site of the cGMP-dependent enzyme. The effect of peptides to decrease nucleotide binding affinity was greater on ADP than on the fluorescent ligand. None of the histone peptide analogs significantly altered adenine nucleotide binding to the catalytic subunit of cAMP-dependent **protein kinase**. Thus, histone H2B(29-35) peptides apparently interact with the peptide or nucleotide binding sites differently in the 2 **protein kinases**, possibly because the dimeric cGMP-dependent **protein kinase** contains a regulatory domain.

IT **9026-43-1, Protein kinase**
RL: BIOL (Biological study)
(cAMP- and cGMP-dependent, phosphorylation site peptide analogs effect on, ATP-binding site in relation to)

IT **81187-15-7**
RL: BIOL (Biological study)
(nucleotide binding by **protein kinases** response to, enzyme ATP-binding site in relation to)

L8 ANSWER 18 OF 19 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1982:506066 HCAPLUS

DOCUMENT NUMBER: 97:106066

TITLE: Interaction of cyclic-GMP-dependent **protein kinase** with phosphate-accepting **proteins** and peptides

AUTHOR(S): Glass, David B.; McFann, L. J.; Miller, M. D.; Zeilig, Charles E.

CORPORATE SOURCE: Sch. Med., Emory Univ., Atlanta, GA, 30322, USA

SOURCE: Cold Spring Harbor Conferences on Cell Proliferation (1981), 8(Protein Phosphorylation, Book A), 267-91
CODEN: CSHCAL; ISSN: 0097-5230

DOCUMENT TYPE: Journal

LANGUAGE: English
AB The sequence specificity and mechanism of cGMP-dependent **protein kinase** (I) were studied with histones and synthetic peptides. The amino acid sequence around substrate phosphorylation sites, in particular the location of basic residues either N- or C-terminal to the phosphorylatable serine, is an important determinant of I specificity. Kinetic studies with synthetic peptides and inhibitors suggested an ordered bi-bi mechanism, although it is possible that with substrates other than those studied a random bi-bi mechanism would be predominant. Differences between the interactions of intact histones and synthetic peptides with I were obsd. with synthetic peptide inhibitors and substrates and in product-inhibition studies.
IT **81187-15-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and reaction kinetics with cGMP-dependent **protein kinase**)

L8 ANSWER 19 OF 19 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:118145 HCAPLUS
DOCUMENT NUMBER: 96:118145
TITLE: Phosphorylation by guanosine 3':5'-monophosphate-dependent **protein kinase** of synthetic peptide analogs of a site phosphorylated in histone H2B
AUTHOR(S): Glass, David B.; Krebs, Edwin G.
CORPORATE SOURCE: Sch. Med., Univ. Washington, Seattle, WA, 98195, USA
SOURCE: Journal of Biological Chemistry (1982), 257(3), 1196-200
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Analogs of a synthetic heptapeptide substrate corresponding to the sequence around a phosphorylation site in histone H2B were used to assess the substrate specificity of cGMP-dependent **protein kinase** from bovine lung. CGMP-dependent **protein kinase** phosphorylated the oligopeptide, Arg-Lys-Arg-Ser32-Arg-Lys-Gly, with favorable kinetic parameters as compared to those for cAMP-dependent **protein kinase**. The contribution of each amino acid to the ability of the peptide to be phosphorylated by cGMP-dependent or cAMP-dependent **protein kinase** was studied by replacement of individual residues and evaluation of the kinetic consts. of the substituted peptides. Peptides contg. acetylated lysine residues or nitroarginine residues were poor substrates for both **protein kinases**. Substitution of either arginine-29 or lysine-30 with alanine increased the Km values and decreased the Vmax values for both **protein kinases**. Substitution of lysine-34 with alanine increased the Vmax values for both **protein kinases**, but did not affect the Km values for either enzyme. Substitution of the phosphorylatable serine with a threonine residue greatly depressed the Vmax for both **protein kinases**. Peptides in which arginine-31 or arginine-33 were replaced by an alanine residue revealed several apparent differences in the specific requirements between cGMP-dependent and cAMP-dependent **protein kinases**.
IT **9026-43-1**
RL: BIOL (Biological study)
(cyclic GMP-dependent, substrate specificity of, with histone H2B phosphorylation site analogs)
IT **81187-15-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction with **protein kinase**)

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DICTIONARY FILE UPDATES:    6 APR 2003  HIGHEST RN 501901-52-6

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in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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     (FILE 'HCAPLUS' ENTERED AT 10:13:37 ON 07 APR 2003)
               SELECT HIT RN L8 1-19

     FILE 'REGISTRY' ENTERED AT 10:14:15 ON 07 APR 2003
L10           17 S E1-E35 AND L1

=>
=>

=> d .seq l10 1-17

L10  ANSWER 1 OF 17  REGISTRY  COPYRIGHT 2003 ACS
RN   459142-01-9  REGISTRY
CN   L-Methionine, L-tryptophyl-L-tyrosyl-L-valylglycyl-L-.alpha.-
     glutamylglycyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   43: PN: WO02070721 PAGE: 143 unclaimed sequence
SQL  7
RN   459142-01-9  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  7

SEQ      1 WYVGEGM
             =====
HITS AT:   3-7

REFERENCE   1:  137:227653
```

L10 ANSWER 2 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **436114-39-5** REGISTRY
CN L-Arginine, L-leucyl-L-.alpha.-aspartyl-L-isoleucyl-L-.alpha.-glutamyl-L-glutaminyl-L-tyrosyl- (9CI) (CA INDEX NAME)
SQL **7**
RN **436114-39-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 LDIEQYR
=====
HITS AT: 1-5

REFERENCE 1: 137:30235

L10 ANSWER 3 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **402940-16-3** REGISTRY
CN Glycine, L-cysteinyl-L-lysyl-L-isoleucyl-L-alanyl-L-.alpha.-aspartyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2: PN: WO0218619 SEQID: 3 unclaimed sequence
SQL **7**
RN **402940-16-3** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 CKIADFG
=====
HITS AT: 3-7

REFERENCE 1: 136:231255

L10 ANSWER 4 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **334774-52-6** REGISTRY
CN L-Glutamine, glycyl-L-leucyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 43: PN: WO0125434 SEQID: 18 claimed sequence
SQL **6**
RN **334774-52-6** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 GLEEAQ
=====
HITS AT: 2-6

REFERENCE 1: 134:309234

L10 ANSWER 5 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **329272-09-5** REGISTRY
CN L-Arginine, L-valyl-L-glutaminyl-L-.alpha.-aspartylglycyl-L-leucyl- (9CI) (CA INDEX NAME)
SQL **6**
RN **329272-09-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 VQDGLR
=====
HITS AT: 1-5

REFERENCE 1: 134:219168

L10 ANSWER 6 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **303070-41-9** REGISTRY
CN L-Alanine, N-[(1,1-dimethylethoxy)carbonyl]-L-.alpha.-aspartyl-L-leucyl-L-isoleucyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-alanyl-, 1,4,5-tris(phenylmethyl) ester (9CI) (CA INDEX NAME)
NTE modified

type	------ location ------		description
modification	Asp-1	-	(1,1-dimethylethoxy) carbonyl<Boc>
modification	Asp-1	-	phenylmethyl<Bzl>
modification	Glu-4	-	phenylmethyl<Bzl>
modification	Glu-5	-	phenylmethyl<Bzl>

SQL **7**
RN **303070-41-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 DLIEEAA
=====
HITS AT: 3-7

REFERENCE 1: 133:322118

L10 ANSWER 7 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **285552-08-1** REGISTRY
CN L-Alanine, L-prolyl-L-leucylglycyl-L-leucyl-L-tryptophyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 12: PN: US6224903 SEQID: 12 claimed protein
CN 20: PN: WO0064486 PAGE: 17 unclaimed sequence
CN 2: PN: WO0120989 TABLE: 1 unclaimed sequence
CN 3: PN: WO0042185 PAGE: 12 unclaimed sequence
CN 60: PN: WO0064247 SEQID: 24 unclaimed sequence
SQL **6**
RN **285552-08-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 PLGLWA
=====
HITS AT: 2-6

REFERENCE 1: 134:331596

REFERENCE 2: 134:256837

REFERENCE 3: 133:355232

REFERENCE 4: 133:349140

REFERENCE 5: 133:191999

REFERENCE 6: 133:131470

L10 ANSWER 8 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **277306-75-9** REGISTRY
CN L-Leucine, L-isoleucyl-L-leucyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)
OTHER NAMES:

CN 103: PN: WO0035937 SEQID: 131 unclaimed sequence
SQL **6**
RN **277306-75-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 ILIVEL
=====
HITS AT: 1-5

REFERENCE 1: 133:54549

L10 ANSWER 9 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **264626-84-8** REGISTRY
CN L-Aspartic acid, L-lysyl-L-leucyl-L-isoleucyl-L-valyl-L-.alpha.-glutamyl-L-threonyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 35: PN: WO0020027 SEQID: 6 claimed protein
CN Human FGF8b protein (85-91)
SQL **7**
RN **264626-84-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 KLIVETD
=====
HITS AT: 1-5

REFERENCE 1: 132:292701

L10 ANSWER 10 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **213979-76-1** REGISTRY
CN L-Proline, L-lysylglycyl-L-prolyl-L-prolyl-L-leucyl- (9CI) (CA INDEX NAME)
SQL **6**
RN **213979-76-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 KGPPLP
=====
HITS AT: 1-5

REFERENCE 1: 129:274397

L10 ANSWER 11 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **197847-26-0** REGISTRY
CN L-Tyrosinamide, O-ethyl-N-(phenylacetyl)-D-tyrosyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)
NTE modified

type	location		description
terminal mod.	Tyr-7	-	C-terminal amide
modification	Tyr-1	-	undetermined modification
modification	Tyr-1	-	ethyl<Et>

SQL **7**
RN **197847-26-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 YFVNKPY

```
            =====
HITS AT:    2-6

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  133:12934

REFERENCE   2:  127:326735

L10  ANSWER 12 OF 17  REGISTRY  COPYRIGHT 2003 ACS
RN   184705-76-8  REGISTRY
CN   Glycine, L-valylglycyl-L-valyl-L-alanyl-L-prolyl-, homopolymer (9CI)  (CA
     INDEX NAME)
NTE  homopolymer
SQL  6
RN   184705-76-8  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  6

SEQ      1 VGVAPG
           = ====
HITS AT:    1, 3-6

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

SEQ      1 VGVAPG
           = ====
HITS AT:    1, 3-6

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  126:29489

L10  ANSWER 13 OF 17  REGISTRY  COPYRIGHT 2003 ACS
RN   143380-45-4  REGISTRY
CN   L-Valine, N-[N-[N-[N-(N-L-lysylglycyl)-L-alanyl]glycyl]-L-.alpha.-
     aspartyl]- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   Fibrinogen .gamma.-chain fragment analog
SQL  6
RN   143380-45-4  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  6

SEQ      1 KGAGDV
           =====
HITS AT:    1-5

REFERENCE   1:  119:198096

REFERENCE   2:  119:158037

REFERENCE   3:  117:129807

L10  ANSWER 14 OF 17  REGISTRY  COPYRIGHT 2003 ACS
RN   137147-52-5  REGISTRY
CN   Glycine, N-[N-[N-[N-(N-L-arginylglycyl)-L-tyrosyl]-L-seryl]-L-leucyl]-,
     polymer with N-[N-[N-(1-L-isoleucyl-L-prolyl)glycyl]-L-valyl]glycine (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   Glycine, N-[N-[N-(1-L-isoleucyl-L-prolyl)glycyl]-L-valyl]-, polymer with
     N-[N-[N-[N-(N-L-arginylglycyl)-L-tyrosyl]-L-seryl]-L-leucyl]glycine (9CI)
NTE  complex
```

homopolymer
SQL 11,6,5
RN **137147-52-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 11,6,5

SEQ 1 IPGVG
=====
HITS AT: 1-3, 4-5

SEQ 1 IPGVG
=====
HITS AT: 1-3, 4-5

SEQ 1 IPGVG
=====
HITS AT: 1-3, 4-5

REFERENCE 1: 115:226377

L10 ANSWER 15 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **129520-69-0** REGISTRY
CN L-Argininamide, N-(3,3-dimethyl-1-oxobutyl)-O-ethyl-D-tyrosyl-L-phenylalanyl-L-valyl-L-asparaginyl-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)
NTE modified

type	location		description
terminal mod.	Arg-7	-	C-terminal amide
modification	Tyr-1	-	ethyl<Et>
modification	Tyr-1	-	undetermined modification

SQL 7
RN **129520-69-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 YFVNKPR
=====
HITS AT: 2-6

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 133:12934

REFERENCE 2: 127:326735

REFERENCE 3: 121:50420

REFERENCE 4: 113:191947

L10 ANSWER 16 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **81187-15-7** REGISTRY
CN L-Glutamic acid, N-[N-[N-[N-[N2-(N2-L-arginyl-L-lysyl)-L-arginyl]-L-seryl]-L-alanyl]-L-alanyl]- (9CI) (CA INDEX NAME)
SQL 7
RN **81187-15-7** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 RKRSAAE
=====
HITS AT: 3-7

REFERENCE 1: 108:127574

REFERENCE 2: 97:106066

REFERENCE 3: 96:118145

L10 ANSWER 17 OF 17 REGISTRY COPYRIGHT 2003 ACS
RN **80755-87-9** REGISTRY
CN L-Valine, L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Valine, N-[N-[N-[N-(N2-L-lysyl-L-glutaminyl)-L-alanyl]glycyl]-L-.alpha.-aspartyl]-
OTHER NAMES:
CN 20: PN: US20020198360 SEQID: 1 unclaimed sequence
CN 2: PN: WO0045856 PAGE: 199 claimed protein
CN 4: PN: US6521211 PAGE: 151 claimed protein
CN 5: PN: DE10119096 PAGE: 10 claimed sequence
CN Fibrinogen .gamma.-chain fragment
SQL **6**
RN **80755-87-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 KQAGDV
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:193258

REFERENCE 2: 138:149730

REFERENCE 3: 138:51697

REFERENCE 4: 137:329502

REFERENCE 5: 137:237629

REFERENCE 6: 137:119161

REFERENCE 7: 136:355484

REFERENCE 8: 136:205503

REFERENCE 9: 135:368937

REFERENCE 10: 133:340225

```
=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 10:19:14 ON 07 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 7 Apr 2003  VOL 138 ISS 15
FILE LAST UPDATED: 6 Apr 2003  (20030406/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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=> d stat que
L1          1283 SEA FILE=REGISTRY ABB=ON  PLU=ON  ([HVLMI][GDEA][VENQILMD][FDPA
                 WYEG][NGQA]|[PQN][KR][NHQ][KRST][NEAQDGIL]|[KVMRIL][LIMV][LMIV]
                 [AVILMG][GEDA]|[VPRILMK][ATQSNG][PEAD][PGA][LEIMVD]|[LYIMVFW][L
                 IMV][NQ][KQRN][PFWY]/SQSP) AND SQL=<7
L2           843 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L1
L3         15785 SEA FILE=REGISTRY ABB=ON  PLU=ON  PROTEIN(L)KINASE?
L4        134105 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L3 OR PROTEIN(5A)KINASE?
L6            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND L4
L7             1 SEA FILE=HCAPLUS ABB=ON  PLU=ON  US20020160478/PN OR WO20001889
                 5/PN
L8            19 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L6 NOT L7
L11        29068 SEA FILE=REGISTRY ABB=ON  PLU=ON  KINASE
L16       240660 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L11 OR KINASE
L17           44 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L16 AND L2
L18           25 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L17 NOT L8
L19           17 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L18 AND (?MODUL? OR ?REGULAT?
                 OR ?CONTOL? OR ?ACTIV?)


=>
=>

=> d ibib abs hitrn l19 1-17

L19  ANSWER 1 OF 17  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2003:133297  HCAPLUS
DOCUMENT NUMBER:          138:180680
TITLE:                    Methods for identification of peptides for diagnosis
                          and treatment of atherosclerotic lesions
INVENTOR(S):              Liu, Cheng; Edgington, Thomas S.; Prescott, Margaret
                          Forney
PATENT ASSIGNEE(S):       Novartis AG, Switz.; Novartis Pharma GmbH; The Scripps
                          Research Institute
SOURCE:                   PCT Int. Appl., 286 pp.
```

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003014145	A2	20030220	WO 2002-EP8942	20020809

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR

PRIORITY APPLN. INFO.: US 2001-311507P P 20010810
OTHER SOURCE(S): MARPAT 138:180680

AB The invention provides peptides that selectively bind to mammalian atherosclerotic lesions. The invention also provides methods for in vivo identification of peptides capable of binding to biomols. as well as methods for identifying the targets of such binding moieties. Methods to diagnose or treat pathol. conditions that involve atherosclerotic lesions are also provided by the invention that involve administering to a mammal a peptide attached to a reporter mol. or a therapeutic agent, resp.

IT **498567-41-2**
RL: ANT (Analyte); DGN (Diagnostic use); PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(conjugate with reporter mol. or therapeutic agent; methods for identification of peptides for diagnosis and treatment of atherosclerotic lesions)

IT **9002-01-1**, Streptokinase **9039-53-6**, Urokinase
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods for identification of peptides for diagnosis and treatment of atherosclerotic lesions)

L19 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:822470 HCAPLUS
Correction of: 2002:240812
DOCUMENT NUMBER: 138:1664
Correction of: 136:275363
TITLE: Polynucleotides and polypeptides associated with albicidin polyketide biosynthesis in Xanthomonas albilineans
INVENTOR(S): Birch, Robert
PATENT ASSIGNEE(S): The University of Queensland, Australia
SOURCE: PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024736	A1	20020328	WO 2001-AU1190	20010921
WO 2002024736	C2	20021107		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001093480	A5	20020402	AU 2001-93480	20010921
PRIORITY APPLN. INFO.:			AU 2000-277	A 20000921
			AU 2000-304	A 20000922
			AU 2000-320	A 20000922
			WO 2001-AU1190	W 20010921

AB The present invention discloses polyketides and the polyketide synthases and ancillary enzymes that are capable of albicidin polyketide biosynthesis in Xanthomonas albilineans. More particularly, the present invention discloses polynucleotides and polypeptides assocd. with (i) a novel polyketide synthase linked to a non-ribosomal peptide synthetase involved in the biosynthesis of albicidins, (ii) a novel phosphopantetheinyl transferase for **activating** enzymes, particularly polyketide synthases and/or non-ribosomal peptide synthetases, assocd. with the biosynthesis of albicidins, and (iii) a novel methyltransferase for methylating precursors of albicidins and/or intermediates related to albicidin biosynthesis. The present invention also discloses methods of using the aforementioned polynucleotides and polypeptides for **activating** polyketide synthases and/or non-ribosomal peptide synthetases, for methylating precursors of albicidins or their analogs and/or intermediates involved in the biosynthesis of albicidins or analogs thereof and for enhancing the level and/or functional **activity** of albicidins or their analogs. Also disclosed are methods of using the polynucleotides and polypeptides of the invention for the biosynthesis of albicidins or their analogs.

IT **476412-94-9**
RL: BSU (Biological study, unclassified); CAT (Catalyst use); PRP (Properties); BIOL (Biological study); USES (Uses)
(amino acid sequence; polynucleotides and polypeptides assocd. with albicidin polyketide biosynthesis in Xanthomonas albilineans)

IT **9013-18-7**
RL: BSU (Biological study, unclassified); CAT (Catalyst use); PRP (Properties); BIOL (Biological study); USES (Uses)
(domain; polynucleotides and polypeptides assocd. with albicidin polyketide biosynthesis in Xanthomonas albilineans)

L19 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	2002:353313 HCAPLUS
DOCUMENT NUMBER:	136:355484
TITLE:	Novel targeted compositions for diagnostic and therapeutic use
INVENTOR(S):	Unger, Evan C.; Matsunaga, Terry O.; Schumann, Patricia A.
PATENT ASSIGNEE(S):	ImaRx Therapeutics, Inc., USA
SOURCE:	PCT Int. Appl., 206 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	9

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002036161	A2	20020510	WO 2001-US32308	20011017
W: AU, CA, JP				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
AU 2002013285	A5	20020515	AU 2002-13285	20011017

PRIORITY APPLN. INFO.: US 2000-699679 A 20001030
WO 2001-US32308 W 20011017

OTHER SOURCE(S): MARPAT 136:355484

AB Novel targeted compns. which may be used for diagnostic and therapeutic use may comprise lipid, protein or polymer gas-filled vesicles which further comprise novel compds. of formula L-P-T, where L is a hydrophobic compd., P is a hydrophilic polymer, and T is a targeting ligand which targets tissues, cells or receptors, including myocardial cells, endothelial cells, epithelial cells, tumor cells and the glycoprotein GPIIbIIIa receptor. Compds. R1R2N-R3-CH(NR4R5)-R6-X1-P-R7-X2-T [X1, X2 is a direct bond or a linking atom or group; R1, R4 = C7-23 acyl; R2, R5 = H or lower alkyl; R3, R6, R7 = a direct bond or C1-10 alkylene; same P and T] are claimed. The compns. can be used in conjunction with diagnostic imaging, such as ultrasound, as well as therapeutic applications, such as therapeutic ultrasound. Examples include the prepn. of N,N'-bis(hexadecylaminocarbonylmethyl)-N,N'-bis[.beta.-(trimethylammonio)ethylaminocarbonylmethyl]-N,N'-dimethylethylenediamine tetraiodide and N-(1,2-dipalmitoyl-sn-glycero-3-succinyl)-PEG-protein A conjugate. Videodensitometric anal. of targeted vesicles-ultrasound backscatter quantitation is shown in a table.

IT **186750-17-4P 186750-21-0P**
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(targeted compns. for diagnostic and therapeutic use)

IT **9002-01-1**, Streptokinase **9039-53-6**, Urokinase
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(targeted compns. for diagnostic and therapeutic use)

IT **80755-87-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(targeted compns. for diagnostic and therapeutic use)

L19 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:185277 HCAPLUS
DOCUMENT NUMBER: 136:242899
TITLE: Phage display libraries and methods for identifying targeting peptides in humans in vivo
INVENTOR(S): Arap, Wadih; Pasqualini, Renata
PATENT ASSIGNEE(S): Board of Regents, the University of Texas System, USA
SOURCE: PCT Int. Appl., 269 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002020723	A2	20020314	WO 2001-US28044	20010907
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001090662	A5	20020322	AU 2001-90662	20010907

PRIORITY APPLN. INFO.: US 2000-231266P P 20000908
US 2001-765101 A 20010117
US 2001-97651 A 20010117

WO 2001-US28044 W 20010907

AB The present invention concerns methods and compns. for identifying human targeting peptides sequences. The methods used for phage display biopanning in the mouse model system require substantial improvements for use with humans. In general, humans suitable for use with phage display are either brain dead or terminal wean patients. The amt. of phage library (preferably primary library) required for administration must be significantly increased, preferably 5 orders of magnitude to 1014 TU or higher, preferably administered i.v. in .apprx.200 mL of Ringer lactate soln. over about a 10-min period. To produce such large phage libraries, the transformed bacterial pellets recovered from up to 500-1000 transformations are amplified up to 10 times in the bacterial host, recovering the phage from each round of amplification and adding LB Tet medium to the bacterial pellet for collection of addnl. phage. Samples of various organs and tissues are collected starting .apprx.15 min after injection of the phage library; samples are processed and phage collected from each organ, tissue or cell type of interest for DNA sequencing to det. the amino acid sequences of targeting peptides. A substantial improvement in the biopanning technique involves polyorgan targeting. It is possible to pool phage collected from multiple organs after a first round of biopanning and inject the pooled sample into a new subject, where each of the multiple organs may be collected for phage rescue, and the protocol repeated for as many rounds of biopanning as desired. In this manner, it is possible to significantly reduce the no. of subjects required for isolation of targeting peptides for multiple organs, while still achieving substantial enrichment of the organ-homing phage. Thus, 320 targeting peptides are identified with specificity for bone marrow, adipose tissue, skeletal muscle, prostate, skin, or multiple organs. The peptides are of use for targeted delivery of therapeutic agents, including gene therapy vectors. Such targeted delivery may be used for detection, diagnosis or treatment of human diseases. In certain embodiments, the peptide may be attached to an imaging agent and administered to a human to obtain an image or to diagnose a disease state. Also disclosed are a large no. of targeting peptide sequences and consensus motifs that are selective for human organs or tissues, obtained by the methods of the present invention.

IT **9031-44-1, Kinase**
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitor, conjugated with targeting peptides; phage display libraries and methods for identifying targeting peptides in humans in vivo)

IT **403700-79-8P 403700-83-4P 403700-84-5P**
RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(targeting peptide for human adipose tissue; phage display libraries and methods for identifying targeting peptides in humans in vivo)

IT **403701-61-1P**
RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(targeting peptide for human bone marrow; phage display libraries and methods for identifying targeting peptides in humans in vivo)

IT **403703-75-3P**
RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(targeting peptide for mouse skeletal muscle; phage display libraries and methods for identifying targeting peptides in humans in vivo)

IT **403702-80-7P**
RL: BPN (Biosynthetic preparation); BUU (Biological use, unclassified); DGN (Diagnostic use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(targeting peptide for multiple organs; phage display libraries and methods for identifying targeting peptides in humans in vivo)

L19 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:41635 HCAPLUS
DOCUMENT NUMBER: 136:107481
TITLE: Peptide-lipid conjugates, liposomes and liposomal drug delivery
INVENTOR(S): Meers, Paul R.; Pak, Charles; Ali, Shaukat; Janoff, Andrew; Franklin, J. Craig; Erukulla, Ravi K.; Cabral-Lilly, Donna; Ahl, Patrick L.
PATENT ASSIGNEE(S): Elan Pharmaceuticalstechnologies, Inc., USA
SOURCE: U.S., 50 pp., Cont.-in-part of U.S. 6,143,716.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6339069	B1	20020115	US 1999-343650	19990629
US 6087325	A	20000711	US 1997-950618	19971015
US 6143716	A	20001107	US 1998-168010	19981007
WO 2001000247	A1	20010104	WO 2000-US16248	20000613
WO 2001000247	C2	20020829		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1198256	A1	20020424	EP 2000-942784	20000613

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL

PRIORITY APPLN. INFO.:

US 1996-27544P	P	19961015
US 1997-39183P	P	19970227
US 1997-950618	A3	19971015
US 1998-168010	A2	19981007
US 1999-343650	A	19990629
WO 2000-US16248	W	20000613

OTHER SOURCE(S): MARPAT 136:107481
AB Peptide-lipid conjugates are incorporated into liposomes so as to selectively destabilize the liposomes in the vicinity of target peptidase-secreting cells, and hence, to deliver the liposomes to the vicinity of the target cells, or directly into the cells. The liposomes can thus be used to treat mammals for diseases, disorders or conditions, e.g., tumors, microbial infection and inflammations, characterized by the occurrence of peptidase-secreting cells.
IT **9039-53-6**, Urokinase **105913-11-9**, Plasminogen **activator**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(peptide-lipid conjugates, liposomes and liposomal drug delivery to peptidase-secreting cells)
IT **389063-76-7**
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide-lipid conjugates, liposomes and liposomal drug delivery to peptidase-secreting cells)
REFERENCE COUNT: 69 THERE ARE 69 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:598291 HCAPLUS
DOCUMENT NUMBER: 135:175339
TITLE: Cells for drug discovery
INVENTOR(S): Case, Casey
PATENT ASSIGNEE(S): Sangamo Biosciences, Inc., USA
SOURCE: PCT Int. Appl., 99 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001059450	A2	20010816	WO 2001-US4301	20010208
WO 2001059450	A3	20020502		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002045158	A1	20020418	US 2001-779233	20010208
EP 1254369	A2	20021106	EP 2001-924089	20010208

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-181117P P 20000208
WO 2001-US4301 W 20010208

AB Disclosed herein are compns. and method useful in screening a compd. for its interaction and/or effect with a mol. target and/or cellular process.

IT **355021-83-9**
RL: PRP (Properties)
(Unclaimed; cells for drug discovery)

IT **9002-06-6**, Thymidine **kinase**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(of herpes simplex virus; cells contg. exogenous zinc-finger proteins for drug discovery)

L19 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:185898 HCAPLUS
DOCUMENT NUMBER: 134:233616
TITLE: Nucleoside-5'-phosphate producing enzyme mutants with enhanced **activity** designed from x-ray crystal structure analysis
INVENTOR(S): Ishikawa, Kohki; Suzuki, Ei-ichiro; Gondoh, Keiko; Shimba, Nobuhisa; Mihara, Yasuhiro; Kawasaki, Hisashi; Kurahashi, Osamu; Kouda, Tohru; Shimaoka, Megumi; Kozutsumi, Rie; Asano, Yasuhisa
PATENT ASSIGNEE(S): Ajinomoto Co., Inc., Japan
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001018184	A1	20010315	WO 2000-JP5973	20000901
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
JP 2001136984	A2	20010522	JP 2000-262120	20000831
BR 2000007056	A	20010814	BR 2000-7056	20000901

PRIORITY APPLN. INFO.: JP 1999-249545 A 19990903
WO 2000-JP5973 W 20000901

AB A variant nucleoside-5'-phosphate producing enzymes (nucleoside-5'-phosphate synthase) having an elevated nucleoside-5'-phosphate prodn. **activity**, phosphotransferase **activity** and/or phosphatase **activity**, are disclosed. By identifying variations on the basis of x-ray structural anal. of known enzyme crystals, it is found out that the above enzyme has a structure wherein, in the nucleoside-5'-phosphate producing enzyme, a Lys residue, two Arg residues and two His residues are present, the C.alpha. distances among these residues fall within a specific range, and there is a space allowing the attachment of nucleoside around these residues. Acid phosphatase (AP) from Escherichia blattae, other Escherichia species, Morganella, Providencia, Enterobacter, or Klebsiella, can be used for x-ray crystal structure anal. Prepn. of nucleotidase **activity** acid phosphatase mutants of Escherichia blattae strain JCM1650, Morganella morganii, and Enterobacter aerogenes by substitution at Gly74Asp, Ile153Thr, or at other defined positions such as Ser72, was shown. Enhanced 5'-inosinic acid prodn. and phosphate transfer **activity**, accompanies by lower Km values for inosine, and compared with that of wild-type and the mutant enzymes was also demonstrated. At. coordinates data from the X-ray crystal structure of AP complexed with molybdic acid (molybdate) was used for anal. and design. A process for efficiently and economically producing a nucleoside-5'-phosphate using the mutant enzyme is claimed.

IT **52350-81-9P**, Nucleoside **kinase**
RL: BAC (Biological activity or effector, except adverse); BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(nucleoside-5'-phosphate producing enzyme mutants with enhanced **activity** designed from x-ray crystal structure anal.)

IT **329180-91-8 329180-93-0 329181-00-2**
329181-01-3 329181-11-5 329181-12-6
RL: PRP (Properties)
(unclaimed sequence; nucleoside-5'-phosphate producing enzyme mutants with enhanced **activity** designed from x-ray crystal structure anal.)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:145156 HCAPLUS
DOCUMENT NUMBER: 134:206555
TITLE: Methods and compositions for impairing multiplication of HIV-1
INVENTOR(S): Goldstein, Gideon
PATENT ASSIGNEE(S): Thymon L.L.C., USA
SOURCE: U.S., 63 pp., Cont.-in-part of U.S. 5,891,994.
CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6193981	B1	20010227	US 1998-113921	19980710
US 5891994	A	19990406	US 1997-893853	19970711
US 6525179	B1	20030225	US 1999-451067	19991130

PRIORITY APPLN. INFO.: US 1997-893853 A2 19970711
US 1998-113921 A3 19980710

AB A compn. which elicits antibodies to greater than 95%, and even greater than 99%, of the known variants of HIV-1 Tat protein contains at least one peptide or polypeptide of the formula of Epitope I (based on amino acids 2-10 of HIV-1 Tat consensus sequence) and optionally one or more of a peptide or polypeptide of Epitope II (based on amino acids 41 to 51 of that sequence), of Epitope III (based on amino acids 52-62 of that sequence), or of Epitope IV (based on amino acids 62 through 72 of that sequence with a C-terminal Pro). Vaccinal and pharmaceutical compns. can contain one or more such peptides assocd. with carrier proteins, in multiple antigenic peptides or as part of recombinant proteins. Various combinations of the Epitope I through IV peptides can provide other compns. useful in eliciting anti-Tat antibodies which cross-react with multiple strains and variants of HIV-1 Tat protein. Vaccinal and pharmaceutical compns. can contain the antibodies induced by the peptide compns. for use in passive therapy. Diagnostic compns. and uses are described for assessing the immune status of vaccinated patients.

IT **9030-53-9**, Galactokinase
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(HIV-1 Tat protein epitopes for vaccines and antibodies)

IT **328383-40-0**
RL: PRP (Properties)
(unclaimed sequence; methods and compns. for impairing multiplication of HIV-1)

REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:114993 HCAPLUS
DOCUMENT NUMBER: 134:198042
TITLE: Pharmaceutical compositions comprising a thrombolytic agent, a non-**immunoreactive** polymer, and a targeting ligand
INVENTOR(S): Unger, Evan C.
PATENT ASSIGNEE(S): ImaRx Therapeutics, Inc., USA
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001010450	A1	20010215	WO 2000-US21418	20000804

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-371193 A 19990810

AB Biocompatible, non-**immunoreactive** polymers are used in combination with both tissue or cellular receptor targeting ligands and thrombolytic agents to affect long acting yet localized lysis of thrombi. Thrombolytic agents include streptokinase, urokinase, tissue plasminogen **activator**, single-chain urokinase plasminogen **activator**, prourokinase, anistreplase, alteplase, etc. Non-**immunoreactive** polymers include polyethylene glycol, copolymers of polyethylene oxide and polyvinyl alc., polyhydroxypropylene glycol, polypropylene glycol, etc. Targeting ligands include antibodies, antibody fragments, proteins, glycoproteins, peptides, polysaccharides, oligosaccharides, and monosaccharides.

IT **325775-12-0P**
RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(pharmaceutical compns. comprising a thrombolytic agent, a non-**immunoreactive** polymer, and a targeting ligand)

IT **9002-01-1**, Streptokinase **9039-53-6**, Urokinase **9040-61-3**, Staphylokinase **82657-92-9**, Prourokinase **139639-24-0D**, Urokinase plasminogen **activator**, single-chain **325775-10-8D**, polymer conjugates
RL: PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(pharmaceutical compns. comprising a thrombolytic agent, a non-**immunoreactive** polymer, and a targeting ligand)

IT **9002-01-1DP**, Streptokinase, polyethylene glycol conjugates **9039-53-6DP**, Urokinase, polyethylene glycol conjugates
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(pharmaceutical compns. comprising a thrombolytic agent, a non-**immunoreactive** polymer, and a targeting ligand)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:841944 HCAPLUS
DOCUMENT NUMBER: 134:13328
TITLE: Screening for inhibitors of the interaction of the cAMP-specific phosphodiesterase PDE4D5 with RACK1
INVENTOR(S): Bolger, Graeme B.; Houslay, Miles D.; Steele, Michael R.; Yarwood, Stephen J.
PATENT ASSIGNEE(S): University of Utah Research Foundation, USA
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071080	A2	20001130	WO 2000-US13961	20000520
WO 2000071080	A3	20010315		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2000052786 A5 20001212 AU 2000-52786 20000520
EP 1183391 A2 20020306 EP 2000-937642 20000520
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

PRIORITY APPLN. INFO.: US 1999-135035P P 19990520
WO 2000-US13961 W 20000520

AB It has been discovered that the cAMP-specific phosphodiesterase, PDE4D5, interacts specifically and with high affinity with the Receptor for **Activated** C-**Kinase** 1 (RACK1). The region of PDE4D5 that interacts with RACK1 was detd., and it was shown that peptides spanning this region inhibit the specific interaction of PDE4D5 and RACK1. Drugs that inhibit or stimulate this interaction should be therapeutically important for treating various conditions. A method for screening candidate drugs involves detecting inhibition or stimulation of this interaction of the peptide and RACK1. Peptides that **modulate** this interaction and methods of making thereof are also disclosed.

IT **309761-46-4**
RL: PRP (Properties)
(unclaimed sequence; screening for inhibitors of the interaction of the cAMP-specific phosphodiesterase PDE4D5 with RACK1)

L19 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:824291 HCAPLUS
DOCUMENT NUMBER: 134:21425
TITLE: Protection of endogenous therapeutic peptides from peptidase **activity** through conjugation to blood components
INVENTOR(S): Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter G.; Holmes, Darren L.; Thibaudeau, Karen
PATENT ASSIGNEE(S): Conjuchem, Inc., Can.
SOURCE: PCT Int. Appl., 733 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517
WO 2000069900	A3	20010215		
WO 2000069900	C2	20020704		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

WO 2000070665 A2 20001123 WO 2000-IB763 20000517
WO 2000070665 A3 20010419

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,

IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1105409	A2	20010613	EP 2000-936023	20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1171582	A2	20020116	EP 2000-929748	20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
EP 1264840	A1	20021211	EP 2002-14617	20000517
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
JP 2003500341	T2	20030107	JP 2000-619018	20000517
JP 2003508350	T2	20030304	JP 2000-618316	20000517
US 6514500	B1	20030204	US 2000-657332	20000907

PRIORITY APPLN. INFO.:

US 1999-134406P	P	19990517
US 1999-153406P	P	19990910
US 1999-159783P	P	19991015
EP 2000-932570	A3	20000517
WO 2000-IB763	W	20000517
WO 2000-US13576	W	20000517

AB A method for protecting a peptide from peptidase **activity** in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a **reactive** group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a **reactive** functionality on a blood component. The solid phase peptide synthesis of a no. of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the **reactive** group and a **reactive** functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase **activity**. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase **activity**. Thus, the percentage of a K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH2) conjugated to human serum albumin via MPA remained relatively const. through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amt. of K5 in only 4 h in plasma.

IT **81493-98-3 175799-54-9 309243-81-0 309243-85-4**
RL: PRP (Properties)
(unclaimed sequence; protection of endogenous therapeutic peptides from peptidase **activity** through conjugation to blood components)

L19 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:608621 HCAPLUS
DOCUMENT NUMBER: 133:191999
TITLE: Method for **regulating** the stability of recombinant proteins, and antibodies and products useful therein
INVENTOR(S): Chain, Daniel G.
PATENT ASSIGNEE(S): Mindset Biopharmaceuticals (USA) Ltd., USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2000050089	A2	20000831	WO 2000-US4749	20000225
WO 2000050089	A3	20010329		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-122103P P 19990226

AB An antibody to a drug of interest is caused to be expressed in a target cell of interest by genetic therapy. This antibody is expressed along with a promoter and **modulator** for the antibody. The drug is administered to the patient, where it binds to the antibody for the drug until a crit. concn. of drug is reached at the target site. Once this crit. concn. of drug is achieved, the antibody is released from the drug/antibody conjugate, and the drug is available at the target site in concns. sufficient to treat the condition for which the drug is administered. In order to ensure that the antibodies are degraded at the proper time, the antibodies are designed to have built-in signals for degrdn.

IT **9002-05-5**, Factor Xa **9014-74-8**, Enterokinase
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(expression of N-terminal stabilon-contg. anti-drug antibody in target cell for directing drug to target cells and for treating infection, cancer, or other genetic or metabolic illness)

IT **54017-28-6 285552-08-1**
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(restriction enzyme site; expression of N-terminal stabilon-contg. anti-drug antibody in target cell for directing drug to target cells and for treating infection, cancer, or other genetic or metabolic illness)

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:806421 HCAPLUS
DOCUMENT NUMBER: 130:193926
TITLE: Binding and lysing of blood clots using MRX-408
AUTHOR(S): Wu, Yunqiu; Unger, Evan C.; McCreery, Thomas P.; Sweitzer, Robert H.; Shen, Dekang; Wu, Guanli; Vielhauer, Matthew D.
CORPORATE SOURCE: ImaRx Pharmaceutical Corp., Tucson, AZ, USA
SOURCE: Investigative Radiology (1998), 33(12), 880-885
CODEN: INVRAV; ISSN: 0020-9996
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB RATIONALE AND OBJECTIVES. A thrombus-specific ultrasound contrast agent, MRX-408, has been developed recently. This agent consists of phospholipid-coated microbubbles with a ligand capable of targeting the GPIIb/IIIa receptor, thereby allowing the microbubbles to bind with thrombi rich in **activated** platelets. In vitro and in vivo animal expts. have been conducted to examine imaging enhancement and sonothrombolysis using this agent compared with a nontargeted agent. METHODS. For clot binding, blood-smeared slides were incubated with microbubbles and examd. under a light microscope. Change in backscatter signals from the blood clots after binding was examd. by both an

ultrasound scanner and two single-element transducers arranged in a transmitter-receiver pair. For clot lysis, either 1-MHz or 20-KHz ultrasound was used to enhance the lysing effects of MRX-408 with or without urokinase. RESULTS. Evidence of binding was demonstrated under a microscope. In vitro expts. showed that the "acoustic signature," or properties, of blood clots changed after binding. Clots became more echogenic and nonlinear. In vivo fundamental ultrasound imaging confirmed that as a result of binding, blood clots were more visible, the area of detection was improved, and shadowing behind clots was more noticeable. Under 1-MHz ultrasound and 30 min of treatment, lysis efficiency reached 34% with MRX-408, whereas there was no visible clot lysis with saline. CONCLUSION. The results of these preliminary studies show that as a contrast agent, MRX-408 enhanced clots under ultrasound imaging and facilitated sonothrombolysis with or without thrombolytic drugs.

IT **9039-53-6**, Urokinase
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(binding and lysing of blood clots using MRX-408: targeting the GPIIb/IIIa receptor)

IT **80755-87-9D**, phospholipid conjugate
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(perfluorobutane microbubbles coated with; binding and lysing of blood clots using MRX-408)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L19 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:13855 HCAPLUS
DOCUMENT NUMBER: 128:99583
TITLE: Use of peptide substrate subtraction libraries to identify highly specific substrates or inhibitors of enzymes and use of said peptides in disease treatment
INVENTOR(S): Madison, Edwin L.; Ke, Song-Hua
PATENT ASSIGNEE(S): Scripps Research Institute, USA; Madison, Edwin L.; Ke, Song-Hua
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9747314	A1	19971218	WO 1997-US9760	19970610
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2257873	AA	19971218	CA 1997-2257873	19970610
AU 9733024	A1	19980107	AU 1997-33024	19970610
AU 735015	B2	20010628		
EP 959894	A1	19991201	EP 1997-928863	19970610
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				

PRIORITY APPLN. INFO.: US 1996-19495P P 19960610
WO 1997-US9760 W 19970610

AB The invention provides substrate subtraction libraries and methods of

using substrate subtraction libraries to identify highly selective substrates for enzymes which use peptides as substrates. In one embodiment, substrates for proteases such as t-PA and u-PA have been identified, in phage display libraries, whose relative **reactivities** towards the two enzymes vary by a factor of more than 9000. The substrates identified by the present invention are useful for the construction of highly selective enzyme inhibitors. Thus, a PAI-1 deriv. that inhibited u-PA .apprx.70 times more rapidly than it inhibited t-PA was prepd. This inhibitor contained the amino acids GSGKSA form the P4 to the P2' positions of the **reactive** center loop.

IT **9039-53-6**, Urokinase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(substrates with differential affinity for t-PA and; use of peptide substrate subtraction libraries to identify highly specific substrates or inhibitors of enzymes and use of said peptides in disease treatment)

IT **201031-86-9P 201032-77-1P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(urokinase/t-PA binding of; use of peptide substrate subtraction libraries to identify highly specific substrates or inhibitors of enzymes and use of said peptides in disease treatment)

IT **9031-44-1P, Kinase**
RL: SPN (Synthetic preparation); PREP (Preparation)
(use of peptide substrate subtraction libraries to identify highly specific substrates or inhibitors of enzymes and use of said peptides in disease treatment)

L19 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:689561 HCAPLUS
DOCUMENT NUMBER: 127:362657
TITLE: Polypeptide proteinase inhibitor, DNA fragment encoding the same, and drug formulations for anticoagulant applications
INVENTOR(S): Morishita, Hideaki; Kanamori, Toshinori; Nobuhara, Masahiro
PATENT ASSIGNEE(S): Mochida Pharmaceutical Co., Ltd., Japan
SOURCE: U.S., 136 pp., Cont.-in-part of U.S. 5,451,659.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5679770	A	19971021	US 1993-57971	19930506
US 5451659	A	19950919	US 1992-972387	19921105
US 5589360	A	19961231	US 1995-431412	19950428

PRIORITY APPLN. INFO.: JP 1991-293472 19911108
JP 1992-119289 19920512
US 1992-972387 19921105

AB This invention particularly provides a novel polypeptide having high protease-inhibiting **activity**, preferably FXa-inhibiting **activity**, which comprises, at least as a part of the polypeptide, an amino acid sequence resulting from substitution of an amino acid for at least one amino acid in amino acid sequence 1 presented in the patent, wherein the amino acid substitution is at least one substitution selected from the following substitution means (i) to (iii). (I) substitution of 15 position Gln counting from the N-terminus by an amino acid other than Gln. (ii) substitution of 42 position Tyr counting from the N-terminus by an amino acid other than Tyr. (iii) substitution of 7 position Arg counting from the N-terminus by an amino acid other than Arg. The invention also provides a process for the prodn. of the polypeptide, a novel DNA fragment encoding the polypeptide and a drug compn. contg. the

same.

IT **9002-05-5**, Blood coagulation factor Xa
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(-inhibiting **activity**; polypeptide proteinase inhibitor, DNA fragment encoding the same, and drug formulations for anticoagulant applications)

IT **158642-16-1**
RL: BOC (Biological occurrence); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); USES (Uses)
(polypeptide proteinase inhibitor, DNA fragment encoding the same, and drug formulations for anticoagulant applications)

L19 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:410557 HCAPLUS
DOCUMENT NUMBER: 123:136567
TITLE: Polypeptides that interact with other proteins and that include conformation-constraining groups flanking a protein-protein interaction site
INVENTOR(S): Evans, Herbert J.; Kini, R. Manjunatha
PATENT ASSIGNEE(S): USA
SOURCE: PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9425482	A1	19941110	WO 1994-US4294	19940421
W: AU, BR, CA, JP, KR, NZ, US, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2161108	AA	19941110	CA 1994-2161108	19940421
AU 9467707	A1	19941121	AU 1994-67707	19940421
US 5965698	A	19991012	US 1996-532818	19960503
US 6100044	A	20000808	US 1997-934224	19970919
US 6258550	B1	20010710	US 1999-413492	19991006

PRIORITY APPLN. INFO.:
US 1993-51741 A 19930423
US 1993-143364 A 19931029
WO 1994-US4294 W 19940421
US 1996-532818 A3 19960503
US 1997-934224 A3 19970919

AB Homologs and analogs of naturally-occurring polypeptides that contain one or more interaction sites of the natural counterpart with the interaction sites flanked by conformation-constraining moieties, such as proline or cysteine, are described for use as therapeutics or as investigative tools. These peptides may also contain non-protein groups that restrict free rotation. A series of derivs. of the RGD peptide were shown to inhibit collagen- or ADP-induced platelet aggregation.

IT **161501-87-7**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence, conformationally constrained RGD peptide analog as platelet aggregation inhibitor; peptides contg. conformation-constraining groups that interact with other proteins and their therapeutic uses)

IT **9002-01-1D**, Streptokinase, conformationally-constrained analogs of peptides of **9040-61-3D**, Staphylokinase, conformationally-constrained analogs of peptides of
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(as fibrinolytics; peptides contg. conformation-constraining groups that interact with other proteins and their therapeutic uses)

IT **9002-05-5D**, Blood-coagulation factor Xa, conformationally-

constrained analogs of peptides of
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptides contg. conformation-constraining groups that interact with other proteins and their therapeutic uses)

L19 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1983:121875 HCAPLUS
DOCUMENT NUMBER: 98:121875
TITLE: Synthesis and properties of cyclic peptides containing the **activation** site of plasminogen
AUTHOR(S): Ganu, Vishwas S.; Shaw, Elliott
CORPORATE SOURCE: Dep. Biol., Brookhaven Natl. Lab., Upton, NY, 11973, USA
SOURCE: International Journal of Peptide & Protein Research (1982), 20(5), 421-8
CODEN: IJPPC3; ISSN: 0367-8377
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The **activation** of plasminogen results from proteolytic cleavage of the Arg560-Val561 bond by plasminogen **activators**. This region of the zymogens occurs in a small SS loop that must restrict the conformation around this bond. The nonapeptide sequence of plasminogen contg. the **activator**-sensitive Arg-Val bond was synthesized. Purified peptide was not a substrate for urokinase (UK) or plasminogen **activator** (PA), but possessed a slightly inhibitory **activity** towards PA. Addn. of a lysine to the N-terminus of the nonapeptide yielded a decapeptide sequence of plasminogen that was a better substrate for UK but not for PA. The decapeptide inhibits PA slightly but not UK. The **active** site geometry for PA must be more restrictive than that of UK, and regions other than the nonapeptide **activatable** site may be involved in productive interactions with the **activators**, inducing a better fit of the cyclic peptide loop.
IT **9039-53-6**
RL: BIOL (Biological study)
(**active** site geometry of, cyclic nonapeptide hydrolysis resistance in relation to)
IT **85004-60-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and coupling with methylbenzenecysteine-contg. tripeptide protected deriv.)

=> select hit rn l19 1-17
E1 THROUGH E47 ASSIGNED

=> fil reg
FILE 'REGISTRY' ENTERED AT 10:19:36 ON 07 APR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 6 APR 2003 HIGHEST RN 501901-52-6
DICTIONARY FILE UPDATES: 6 APR 2003 HIGHEST RN 501901-52-6

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
=>

=> d his l20

(FILE 'HCAPLUS' ENTERED AT 10:19:14 ON 07 APR 2003)
SELECT HIT RN L19 1-17

FILE 'REGISTRY' ENTERED AT 10:19:36 ON 07 APR 2003
L20 31 S E1-E47 AND L1

=>
=>

=> d .seq l20 1-31

L20 ANSWER 1 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **498567-41-2** REGISTRY
CN L-Methionine, L-valyl-L-asparaginyl-L-arginyl-L-seryl-L-.alpha.-aspartylglycyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 410: PN: WO03014145 SEQID: 410 claimed sequence
SQL **7**
RN **498567-41-2** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 VNRSDGM
=====
HITS AT: 3-7

REFERENCE 1: 138:180680

L20 ANSWER 2 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **476412-94-9** REGISTRY
CN Glycine, L-valyl-L-leucyl-L-.alpha.-aspartyl-L-valyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 99: PN: WO0224736 SEQID: 99 claimed
CN Methyltransferase (Xanthomonas albilineans gene xabC conserved motif I)
SQL **7**
RN **476412-94-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 VLDVAAG
=====
HITS AT: 2-6

REFERENCE 1: 138:1664

L20 ANSWER 3 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **403703-75-3** REGISTRY
CN L-Valine, L-valylglycyl-L-prolyl-L-alanyl- (9CI) (CA INDEX NAME)
SQL **5**
RN **403703-75-3** REGISTRY

FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **5**

SEQ 1 VGPAV
=====
HITS AT: 1-5

REFERENCE 1: 136:242899

L20 ANSWER 4 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **403702-80-7** REGISTRY
CN L-Alanine, L-phenylalanylglycyl-L-valylglycyl-L-glutaminyl-L-tryptophyl- (9CI) (CA INDEX NAME)
SQL **7**
RN **403702-80-7** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 FGVGQWA
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HITS AT: 3-7

REFERENCE 1: 137:88982

REFERENCE 2: 136:242899

L20 ANSWER 5 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **403701-61-1** REGISTRY
CN Glycine, L-leucylglycyl-L-.alpha.-glutamyl-L-alanylglycylglycyl- (9CI) (CA INDEX NAME)
SQL **7**
RN **403701-61-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 LGEAGGG
=====
HITS AT: 1-5

REFERENCE 1: 137:88982

REFERENCE 2: 136:242899

L20 ANSWER 6 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **403700-84-5** REGISTRY
CN Glycine, L-leucyl-L-seryl-L-prolylglycyl-L-valyl-L-lysyl- (9CI) (CA INDEX NAME)
SQL **7**
RN **403700-84-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 LSPGVKG
=====
HITS AT: 1-5

REFERENCE 1: 137:88982

REFERENCE 2: 136:242899

L20 ANSWER 7 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **403700-83-4** REGISTRY
CN Glycine, L-valyl-L-leucyl-L-seryl-L-prolylglycyl-L-leucyl- (9CI) (CA

INDEX NAME)
SQL 7
RN 403700-83-4 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 VLSPGLG
=====
HITS AT: 2-6

REFERENCE 1: 137:88982

REFERENCE 2: 136:242899

L20 ANSWER 8 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN 403700-79-8 REGISTRY
CN Glycine, L-valyl-L-leucyl-L-valylglycyl-L-.alpha.-glutamylglycyl- (9CI) (CA INDEX NAME)
SQL 7
RN 403700-79-8 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 VLVGEGG
=======
HITS AT: 1-7

REFERENCE 1: 137:88982

REFERENCE 2: 136:242899

L20 ANSWER 9 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN 389063-76-7 REGISTRY
CN L-Argininamide, L-prolyl-L-leucylglycyl-L-leucyl-.beta.-phenyl-L-phenylalanyl-L-alanyl- (9CI) (CA INDEX NAME)
NTE modified

type	location		description
terminal mod.	Arg-7	-	C-terminal amide
modification	Phe-5	-	phenyl<Ph>

SQL 7
RN 389063-76-7 REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 PLGLFAR
=====
HITS AT: 2-6

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 136:107481

L20 ANSWER 10 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN 355021-83-9 REGISTRY
CN L-Arginine, L-arginyl-L-seryl-L-.alpha.-aspartyl-L-alanyl-L-leucyl-L-seryl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4031: PN: WO0242459 PAGE: 69 claimed sequence
CN 71: PN: WO02057293 TABLE: 3 unclaimed sequence
CN 76: PN: WO02057294 TABLE: 2 unclaimed sequence

SQL 7
RN **355021-83-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 RSDALSR
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HITS AT: 1-5

REFERENCE 1: 137:121350

REFERENCE 2: 137:89450

REFERENCE 3: 137:16500

REFERENCE 4: 135:175339

L20 ANSWER 11 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **329181-12-6** REGISTRY
CN L-Alanine, L-threonyl-L-asparaginyl-L-methionyl-L-.alpha.-aspartyl-L-.alpha.-glutamyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 119: PN: WO0118184 SEQID: 85 unclaimed sequence
SQL 7
RN **329181-12-6** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 TNMDEDA
=====
HITS AT: 3-7

REFERENCE 1: 134:233616

L20 ANSWER 12 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **329181-11-5** REGISTRY
CN L-Valine, L-.alpha.-aspartyl-L-leucyl-L-alanyl-L-.alpha.-glutamylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 118: PN: WO0118184 SEQID: 82 unclaimed sequence
SQL 7
RN **329181-11-5** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 DLAEGDV
=====
HITS AT: 2-6

REFERENCE 1: 134:233616

L20 ANSWER 13 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **329181-01-3** REGISTRY
CN L-Valine, L-asparaginyl-L-leucyl-L-seryl-L-alanylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 107: PN: WO0118184 SEQID: 52 unclaimed sequence
SQL 7
RN **329181-01-3** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 7

SEQ 1 NLSAGDV

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HITS AT:    2-6

REFERENCE    1:  134:233616

L20  ANSWER 14 OF 31  REGISTRY  COPYRIGHT 2003 ACS
RN   329181-00-2  REGISTRY
CN   L-Valine, L-asparaginyl-L-leucyl-L-seryl-L-prolylglycyl-L-.alpha.-aspartyl-
      (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   106: PN: WO0118184 SEQID: 49 unclaimed sequence
SQL  7
RN   329181-00-2  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  7

SEQ       1 NLSPGDV
              =====
HITS AT:    2-6

REFERENCE    1:  134:233616

L20  ANSWER 15 OF 31  REGISTRY  COPYRIGHT 2003 ACS
RN   329180-93-0  REGISTRY
CN   L-Valine, L-asparaginyl-L-leucyl-L-seryl-L-.alpha.-glutamylglycyl-L-
     .alpha.-aspartyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   99: PN: WO0118184 SEQID: 28 unclaimed sequence
SQL  7
RN   329180-93-0  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  7

SEQ       1 NLSEGDV
              =====
HITS AT:    2-6

REFERENCE    1:  134:233616

L20  ANSWER 16 OF 31  REGISTRY  COPYRIGHT 2003 ACS
RN   329180-91-8  REGISTRY
CN   L-Valine, L-asparaginyl-L-leucyl-L-seryl-L-.alpha.-aspartylglycyl-L-
     .alpha.-aspartyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   97: PN: WO0118184 SEQID: 22 unclaimed sequence
SQL  7
RN   329180-91-8  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  7

SEQ       1 NLSDGDV
              =====
HITS AT:    2-6

REFERENCE    1:  134:233616

L20  ANSWER 17 OF 31  REGISTRY  COPYRIGHT 2003 ACS
RN   328383-40-0  REGISTRY
CN   L-Asparagine, L-arginyl-L-arginyl-L-alanyl-L-prolyl-L-prolyl-L-.alpha.-
     aspartyl- (9CI)  (CA INDEX NAME)
OTHER NAMES:
CN   51: PN: US6193981 SEQID: 50 unclaimed sequence
SQL  7
```

RN **328383-40-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 RRAPPDN
=====
HITS AT: 2-6

REFERENCE 1: 134:206555

L20 ANSWER 18 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **325775-12-0** REGISTRY
CN L-Valine, L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)
NTE modified (modifications unspecified)

type	------ location ------		description
modification	-	-	undetermined modification

SQL **6**
RN **325775-12-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 KQAGDV
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 KQAGDV
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

SEQ 1 KQAGDV
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 134:198042

L20 ANSWER 19 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **325775-10-8** REGISTRY
CN L-Phenylalanine, L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)
SQL **6**
RN **325775-10-8** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 KQAGDF
=====
HITS AT: 1-5

REFERENCE 1: 134:198042

L20 ANSWER 20 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **309761-46-4** REGISTRY
CN L-Alanine, L-histidyl-L-seryl-L-leucyl-L-isoleucyl-L-leucyl-L-leucyl-

(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 36: PN: WO0071080 SEQID: 37 unclaimed sequence
SQL **7**
RN **309761-46-4** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 HSLILLA
=====
HITS AT: 3-7

REFERENCE 1: 134:13328

L20 ANSWER 21 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **309243-85-4** REGISTRY
CN Glycine, L-tyrosyl-L-isoleucyl-L-glutaminyl-L-asparaginyl-L-prolyl-L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 45: PN: WO0069900 SEQID: 47 unclaimed sequence
SQL **7**
RN **309243-85-4** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 YIQNPRG
=====
HITS AT: 1-5

REFERENCE 1: 134:21425

L20 ANSWER 22 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **309243-81-0** REGISTRY
CN Glycine, L-tyrosyl-L-isoleucyl-L-glutaminyl-L-asparaginyl-L-prolyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 38: PN: WO0069900 SEQID: 40 unclaimed sequence
SQL **7**
RN **309243-81-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 YIQNPLG
=====
HITS AT: 1-5

REFERENCE 1: 134:21425

L20 ANSWER 23 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **285552-08-1** REGISTRY
CN L-Alanine, L-prolyl-L-leucylglycyl-L-leucyl-L-tryptophyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 12: PN: US6224903 SEQID: 12 claimed protein
CN 20: PN: WO0064486 PAGE: 17 unclaimed sequence
CN 2: PN: WO0120989 TABLE: 1 unclaimed sequence
CN 3: PN: WO0042185 PAGE: 12 unclaimed sequence
CN 60: PN: WO0064247 SEQID: 24 unclaimed sequence
SQL **6**
RN **285552-08-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 PLGLWA
=====
HITS AT: 2-6

REFERENCE 1: 134:331596

REFERENCE 2: 134:256837

REFERENCE 3: 133:355232

REFERENCE 4: 133:349140

REFERENCE 5: 133:191999

REFERENCE 6: 133:131470

L20 ANSWER 24 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **201032-77-1** REGISTRY
CN L-Methionine, L-serylglycyl-L-arginyl-L-alanyl-L-alanyl-L-alanyl- (9CI) (CA INDEX NAME)
SQL **7**
RN **201032-77-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 SGRAAAM
=====
HITS AT: 3-7

REFERENCE 1: 128:99583

L20 ANSWER 25 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **201031-86-9** REGISTRY
CN L-Valine, L-arginyl-L-alanyl-L-alanyl-L-alanyl-L-methionyl- (9CI) (CA INDEX NAME)
SQL **6**
RN **201031-86-9** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

SEQ 1 RAAAMV
=====
HITS AT: 1-5

REFERENCE 1: 128:99583

L20 ANSWER 26 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **186750-21-0** REGISTRY
CN L-Valine, hydroxyacetyl-L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl-, monoether with .alpha.-[(10R)-7-hydroxy-7-oxido-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-6,8,12-trioxa-3-aza-7-phosphaoctacos-1-yl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Valine, hydroxyacetyl-L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl-, monoether with (R)-.alpha.-[7-hydroxy-7-oxido-2,13-dioxo-10-[(1-oxohexadecyl)oxy]-6,8,12-trioxa-3-aza-7-phosphaoctacos-1-yl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl)
OTHER NAMES:
CN 13: PN: US6521211 PAGE: 103 claimed sequence
NTE modified (modifications unspecified)

type	------ location ------	description

modification Lys-1 - undetermined modification

SQL 6
RN **186750-21-0** REGISTRY
FS PROTEIN SEQUENCE
SQL 6

SEQ 1 KQAGDV
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:193258

REFERENCE 2: 136:355484

REFERENCE 3: 133:340225

REFERENCE 4: 133:182966

REFERENCE 5: 130:249137

REFERENCE 6: 126:162273

L20 ANSWER 27 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **186750-17-4** REGISTRY
CN L-Valine, hydroxyacetyl-L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl-, monoether with .alpha.-[2-[[4-[(2R)-2,3-bis[(1-oxohexadecyl)oxy]propoxy]-1,4-dioxobutyl]amino]ethyl]-.omega.-hydroxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9: PN: US6521211 PAGE: 99 claimed sequence
NTE modified (modifications unspecified)

type	location	description
modification	Lys-1 -	undetermined modification

SQL 6
RN **186750-17-4** REGISTRY
FS PROTEIN SEQUENCE
SQL 6

SEQ 1 KQAGDV
=====
HITS AT: 1-5

RELATED SEQUENCES AVAILABLE WITH SEQLINK

REFERENCE 1: 138:193258

REFERENCE 2: 136:355484

REFERENCE 3: 133:340225

REFERENCE 4: 133:182966

REFERENCE 5: 126:162273

L20 ANSWER 28 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **161501-87-7** REGISTRY
CN L-Alanine, L-alanyl-L-prolyl-L-leucyl-L-.alpha.-aspartyl-L-valyl-L-prolyl-

(9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Alanine, N-[1-[N-[N-[N-(1-L-alanyl-L-prolyl)-L-leucyl]-L-.alpha.-aspartyl]-L-valyl]-L-prolyl]-
OTHER NAMES:
CN 13: PN: US6084066 SEQID: 13 claimed sequence
CN 19: PN: US6111069 SEQID: 13 unclaimed sequence
CN 25: PN: US6147189 SEQID: 13 unclaimed sequence
SQL **7**
RN **161501-87-7** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 APLDVPA
=====
HITS AT: 3-7

REFERENCE 1: 133:359252

REFERENCE 2: 133:203022

REFERENCE 3: 133:85837

REFERENCE 4: 123:136567

L20 ANSWER 29 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **158642-16-1** REGISTRY
CN L-Aspartic acid, glycyl-L-valyl-L-prolylglycyl-L-.alpha.-aspartylglycyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Aspartic acid, N-[N-[N-[N-[1-(N-glycyl-L-valyl)-L-prolyl]glycyl]-L-.alpha.-aspartyl]glycyl]-
SQL **7**
RN **158642-16-1** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **7**

SEQ 1 GVPGDGD
=====
HITS AT: 3-7

REFERENCE 1: 127:362657

REFERENCE 2: 122:4392

L20 ANSWER 30 OF 31 REGISTRY COPYRIGHT 2003 ACS
RN **85004-60-0** REGISTRY
CN L-Cysteinamide, N5-[imino(nitroamino)methyl]-L-ornithyl-L-valyl-L-valylglycylglycyl-S-[(4-methylphenyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)
NTE modified

type	------ location ------		description
terminal mod.	Cys-6	-	C-terminal amide
modification	-	-	undetermined modification
modification	Arg-1	-	nitro<N>
modification	Cys-6	-	(4-methylphenyl)methyl

SQL **6**
RN **85004-60-0** REGISTRY
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL **6**

```
SEQ      1 RVVGGC
           =====
HITS AT:   1-5

REFERENCE   1:  98:121875

L20  ANSWER 31 OF 31  REGISTRY  COPYRIGHT 2003 ACS
RN   80755-87-9  REGISTRY
CN   L-Valine, L-lysyl-L-glutaminyl-L-alanylglycyl-L-.alpha.-aspartyl- (9CI)
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   L-Valine, N-[N-[N-[N-(N2-L-lysyl-L-glutaminyl)-L-alanyl]glycyl]-L-.alpha.-
     aspartyl]-
OTHER NAMES:
CN   20: PN: US20020198360 SEQID: 1 unclaimed sequence
CN   2: PN: WO0045856 PAGE: 199 claimed protein
CN   4: PN: US6521211 PAGE: 151 claimed protein
CN   5: PN: DE10119096 PAGE: 10 claimed sequence
CN   Fibrinogen .gamma.-chain fragment
SQL  6
RN   80755-87-9  REGISTRY
FS   PROTEIN SEQUENCE; STEREOSEARCH
SQL  6

SEQ      1 KQAGDV
           =====
HITS AT:   1-5

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

REFERENCE   1:  138:193258

REFERENCE   2:  138:149730

REFERENCE   3:  138:51697

REFERENCE   4:  137:329502

REFERENCE   5:  137:237629

REFERENCE   6:  137:119161

REFERENCE   7:  136:355484

REFERENCE   8:  136:205503

REFERENCE   9:  135:368937

REFERENCE  10:  133:340225
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FILE 'REGISTRY' ENTERED AT 09:46:57 ON 10 FEB 2003
L1 70 S GSLK/SQSP AND SQL=<25

FILE 'HCAPLUS' ENTERED AT 09:47:58 ON 10 FEB 2003
L2 50 S L1
L3 21 S L2 NOT (PD=>20020108 OR PY=>2002)

L3 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:126741 HCAPLUS
DOCUMENT NUMBER: 136:166060
TITLE: Antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae
INVENTOR(S): Galeotti, Cesira; Grandi, Guido; Masignani, Vega; Mora, Mariarosa; Pizza, Mariagrazia; Rappuoli, Rino; Ratti, Guilio; Scarlato, Vincenzo; Scarselli, Maria
PATENT ASSIGNEE(S): Chiron S.p.A., Italy
SOURCE: PCT Int. Appl., 974 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001031019 A2		20010503	WO 2000-IB1661	20001030

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-PV162616 19991029

AB This invention provides proteins and fragments thereof derived from the bacteria Neisseria meningitidis serotype A, N. meningitidis serotype B, and N. gonorrhoeae. Th protein sequences disclosed in International Application patents WO 1999/57280 and WO 2000/22430 were subjected to computer anal. to predict antigenic peptide fragments, using three algorithms: AMPHI, ANTIGENIC INDEX, and HYDROPHOBICITY. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto (e.g., antisense nucleic acids). Addnl., this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compns. of the protein fragments and/or nucleic acids for use as vaccines, diagnostic reagents, immunogenic compns., and the like. [This abstr. record is the seventh of 8 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.]

IT **359664-87-2 359665-57-9 359681-04-2 359682-03-4 395114-02-0 395114-33-7**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(amino acid sequence; Neisseria meningitidis and N. gonorrhoeae antigens and the genes encoding them for use as vaccine and diagnostic compns.)

L3 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:15588 HCAPLUS
DOCUMENT NUMBER: 136:84685
TITLE: Antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae
INVENTOR(S): Galeotti, Cesira; Grandi, Guido; Masignani, Vega; Mora, Mariarosa; Pizza, Mariagrazia; Rappuoli, Rino; Ratti, Guilio; Scarlato, Vincenzo; Scarselli, Maria
PATENT ASSIGNEE(S): Chiron S.p.A., Italy
SOURCE: PCT Int. Appl., 974 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001031019 A2		20010503	WO 2000-IB1661	20001030

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-PV162616 19991029

AB This invention provides proteins and fragments thereof derived from the bacteria Neisseria meningitidis serotype A, N. meningitidis serotype B, and N. gonorrhoeae. Th protein sequences disclosed in International Application patents WO 1999/57280 and WO 2000/22430 were subjected to computer anal. to predict antigenic peptide fragments, using three algorithms: AMPHI, ANTIGENIC INDEX, and HYDROPHOBICITY. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto (e.g., antisense nucleic acids). Addnl., this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compns. of the protein fragments and/or nucleic acids for use as vaccines, diagnostic reagents, immunogenic compns., and the like. [This abstr. record is the fifth of 8 records for this document necessitated by the large no. of index entries required to fully index the document and publication system constraints.]

IT **359664-87-2 359665-57-9**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; Neisseria meningitidis and N. gonorrhoeae antigens and the genes encoding them for use as vaccine and diagnostic compns.)

L3 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:871941 HCAPLUS
DOCUMENT NUMBER: 136:4714
TITLE: Antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae
INVENTOR(S): Galeotti, Cesira; Grandi, Guido; Masignani, Vega; Mora, Mariarosa; Pizza, Mariagrazia; Rappuoli, Rino; Ratti, Guilio; Scarlato, Vincenzo; Scarselli, Maria
PATENT ASSIGNEE(S): Chiron S.p.A., Italy
SOURCE: PCT Int. Appl., 974 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001031019 A2		20010503	WO 2000-IB1661	20001030

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-PV162616 19991029

AB This invention provides proteins and fragments thereof derived from the bacteria Neisseria meningitidis serotype A, N. meningitidis serotype B, and N. gonorrhoeae. Th protein sequences disclosed in International Application patents WO 1999/57280 and WO 2000/22430 were subjected to computer anal. to predict antigenic peptide fragments, using three algorithms: AMPHI, ANTIGENIC INDEX, and HYDROPHOBICITY. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto (e.g., antisense nucleic acids). Addnl., this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compns. of the protein fragments and/or nucleic acids for use as vaccines, diagnostic reagents, immunogenic compns., and the like. [This abstr. is the fourth of 8 records for this codument necessitated by the large no. of index entries required to fully index the document and publication system constraints.]

IT **321870-10-4 321870-65-9**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(amino acid sequence; Neisseria meningitidis and N. gonorrhoeae antigens and the genes encoding them for use as vaccine and diagnostic compns.)

L3 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:816740 HCAPLUS
DOCUMENT NUMBER: 135:356769
TITLE: Monoclonal and humanized antibodies selective

for tumor necrosis factor-related apoptosis-inducing ligand receptor DR5

INVENTOR(S): Zhou, Tong; Ichikawa, Kimihisa; Kimberly, Robert P.; Koopman, William J.

PATENT ASSIGNEE(S): UAB Research Foundation, USA

SOURCE: PCT Int. Appl., 229 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083560	A1	20011108	WO 2001-US14151	20010502

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-201344P P 20000502

AB The authors disclose the prepn. and characterization of antibodies targeting human TRAIL receptor DR5. Also disclosed are sequences of the anti-DR5 antibodies and the prepn. of vectors for expression of the antibodies in host cells. The authors demonstrate the receptor agonistic effects wherein the antibodies induce including inhibition of tumor cell proliferation and apoptosis of cells with surface expression of DR5.

IT **372483-84-6**
RL: PRP (Properties)
(unclaimed sequence; monoclonal and humanized antibodies selective for tumor necrosis factor-related apoptosis-inducing ligand receptor DR5)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:400021 HCAPLUS

DOCUMENT NUMBER: 135:240910

TITLE: Antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae

INVENTOR(S): Galeotti, Cesira; Grandi, Guido; Masignani, Vega; Mora, Mariarosa; Pizza, Mariagrazia; Rappuoli, Rino; Ratti, Guilio; Scarlato, Vincenzo; Scarselli, Maria

PATENT ASSIGNEE(S): Chiron Spa, Italy

SOURCE: PCT Int. Appl., 947 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001031019 A2		20010503	WO 2000-IB1661	20001030

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, CY, DE, DK, ES, FI, FR, GA, GB, GR, IE, IT, LU, MC, ML, MR, NE, NL, PT, SE, SN, TD, TG

PRIORITY APPLN. INFO.: US 1999-PV162616 19991029

AB This invention provides proteins and fragments thereof derived from the bacteria Neisseria meningitidis serotype A, N. meningitidis serotype B, and N. gonorrhoeae. Th protein sequences disclosed in International Application patents WO 1999/57280 and WO 2000/22430 were subjected to computer anal. to predict antigenic peptide fragments, using three algorithms: AMPHI, ANTIGENIC INDEX, and HYDROPHOBICITY. Also provided are nucleic acids encoding for such proteins, polypeptides, and/or fragments, as well as nucleic acids complementary thereto (e.g., antisense nucleic acids). Addnl., this invention provides antibodies which bind to the proteins, polypeptides, and/or fragments. This invention further provides expression vectors useful for making the proteins, polypeptides, and/or fragments, as well as host cells transformed with such vectors. This invention also provides compns. of the protein fragments and/or nucleic acids for use as vaccines, diagnostic reagents, immunogenic compns., and the like. [This abstr. record is the second of 8 records for this document necessitated by the larg no. of index entries required to fully index the document and publication system constraints.]

IT **359664-87-2 359665-57-9 359680-57-2 359681-04-2 359681-93-9 359682-03-4**
RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(antigenic peptides from Neisseria meningitidis and Neisseria gonorrhoeae)

L3 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:	2001:309785 HCAPLUS
DOCUMENT NUMBER:	135:46424
TITLE:	Design and synthesis of peptides that bind .alpha.-bungarotoxin with high affinity
AUTHOR(S):	Kasher, Roni; Balass, Moshe; Scherf, Tali; Fridkin, Mati; Fuchs, Sara; Katchalski-Katzir, Ephraim
CORPORATE SOURCE:	Department of Biological Chemistry, The Weizmann Institute of Science, Rehovot, 76100, Israel
SOURCE:	Chemistry & Biology (2001), 8(2), 147-155 CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER:	Elsevier Science Ltd.
DOCUMENT TYPE:	Journal
LANGUAGE:	English

AB .alpha.-Bungarotoxin (.alpha.-BTX) is a highly toxic snake venom .alpha.-neurotoxin that binds to acetylcholine receptor (AChR) at the neuromuscular junction, and is a potent inhibitor of this receptor. We describe the design and synthesis of peptides that

bind .alpha.-BTX with high affinity, and inhibit its interaction with AChR with an IC50 of 2 nM. The design of these peptides was based on a lead peptide with an IC50 of 3 .times. 10-7 M, previously identified by us using a phage-display peptide library. Employing NMR-derived structural information of the complex of .alpha.-BTX with the lead peptide, as well as structure-function anal. of the ligand-binding site of AChR, a systematic residue replacement of the lead peptide, one position at a time, yielded 45 different 13-mer peptides. Of these, two peptides exhibited a one order of magnitude increase in inhibitory potency in comparison to the lead peptide. The design of addnl. peptides, with two or three replacements, resulted in peptides that exhibited a further increase in inhibitory potency (IC50 values of 2 nM), that is more than two orders of magnitude better than that of the original lead peptide, and better than that of any known peptide derived from AChR sequence. The high affinity peptides had a protective effect on mice against .alpha.-BTX lethality.

IT **345223-13-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of .alpha.-bungarotoxin-binding peptides via systematic residue substitution from prototype compds.)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:119925 HCAPLUS
DOCUMENT NUMBER: 132:221073
TITLE: Multiple cross-reactive self-ligands for Borrelia burgdorferi-specific HLA-DR4-restricted T cells
AUTHOR(S): Maier, Bert; Molinger, Marc; Cope, Andrew P.; Fugger, Lars; Schneider-Mergener, Jens; Sonderstrup, Grete; Kamradt, Thomas; Kramer, Achim
CORPORATE SOURCE: Deutsches Rheumaforschungszentrum, Berlin, D-10117, Germany
SOURCE: European Journal of Immunology (2000), 30(2), 448-457
CODEN: EJIMAF; ISSN: 0014-2980
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB T cell recognition of self antigens is a key event in the pathogenesis of autoimmune diseases. To date, the initial events that trigger autoreactive T cells are unknown. The "mol. mimicry" hypothesis predicts that during an infection T cells that recognize both a microbial antigen and a related self peptide become activated and cause autoimmune disease. The authors have systematically examd. the recognition of self antigens by HLA-DR4-restricted T cells specific for peptides of the outer surface protein A (OspA) of Borrelia burgdorferi, the etiol. agent of Lyme disease. The authors used the peptide spot synthesis technique for complete peptide substitution analyses of 2 immunodominant OspA epitopes. Each amino acid residue of the epitopes was substituted with all 20 naturally occurring amino acids and the altered peptides were tested for

recognition by a panel of OspA-specific T cells. The binding motifs (supertopes) revealed by these analyses were used to screen public databases for matching human or murine peptides. Several hundred peptides were identified by this search and synthesized. Of these, 28 were recognized by OspA-specific T cells. Thus, T cell cross-reactivity is a common phenomenon and the existence of cross-reactive epitopes alone does not imply mol. mimicry-mediated pathol. and autoimmunity.

IT **261622-78-0**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(cross-reactive self-ligands for OspA Borrelia burgdorferi-specific HLA-DR4-restricted T-cells)

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:724489 HCAPLUS
DOCUMENT NUMBER: 130:64994
TITLE: Isolation, characterization, and comparison of antipeptide and antiprotein rabbit antibodies to the .pi.-isoform of glutathione S-transferase
AUTHOR(S): Di Modugno, Francesca; Rosano, Laura; Castelli, Mauro; Chersi, Alberto
CORPORATE SOURCE: Lab. Biochemistry, Regina Elena Inst. Cancer Research, Rome, I-00158, Italy
SOURCE: Zeitschrift fuer Naturforschung, C: Biosciences (1998), 53(9/10), 902-910
CODEN: ZNCBDA; ISSN: 0341-0382
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The main linear epitopes of .pi.-glutathione transferase (.pi.-GST, EC 2.5.1.18), an enzyme related to cancer progression in a restricted no. of tumors, were identified by testing in ELISA the reactivities of polyclonal anti-.pi.-GST rabbit sera against 51 overlapping decapeptides, covering the whole 216-residue sequence of the protein. Several major reactivity peaks were detected, each covering 2 or 3 adjacent peptides. The most active fragments were then reconstructed by conventional solid-phase synthesis, linked to Sepharose, and used as affinity ligands for isolating specific anti-.pi.-GST antibody subsets. A second group of antisera was then prepd. in rabbits by using as immunogens some of the above described synthetic fragments, linked to a carrier protein, and antipeptide antibodies purified by affinity chromatog. An ELISA test was then performed, using as antigens a panel of peptides and different isoforms of GST, to establish whether antibodies isolated from total anti-.pi.-GST sera would display higher reactivity and specificity, as compared to traditional antipeptide antibodies. Binding data clearly confirm that the former might be indeed better reagents for the detection and possibly quantitation of .pi.-GST.

IT **218135-73-0**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(identification of cross-reacting peptides; isolation, characterization, and comparison of antipeptide and antiprotein

rabbit antibodies to the .pi.-isoform of glutathione S-transferase)
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:148583 HCAPLUS
DOCUMENT NUMBER: 128:267916
TITLE: De novo peptide sequencing in an ion trap mass spectrometer with 18O labeling
AUTHOR(S): Qin, Jun; Herring, Christopher J.; Zhang, Xiaolong
CORPORATE SOURCE: Laboratory of Biophysical Chemistry, National Heart, Lung, and Blood Institute, NIH, Bethesda, MD, 20892, USA
SOURCE: Rapid Communications in Mass Spectrometry (1998), 12(5), 209-216
CODEN: RCMSEF; ISSN: 0951-4198
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB De novo peptide sequencing in an ion trap mass spectrometer coupled online with a capillary HPLC using 18O labeling provides a viable alternative to the method using the combination of nanospray, 18O labeling and a quadrupole/time-of-flight mass spectrometer. Seven to sixteen amino acid residues can be sequenced from the liq. chromatog./tandem mass spectrometry (LC/MS/MS) spectra. This approach combines the benefit of capillary LC and the high sensitivity of the ion trap operated in the MS/MS mode. The wide availability of the LCQ mass spectrometer makes this approach readily adaptable to the biol. mass spectrometry community.
IT **205585-84-8**
RL: ANT (Analyte); ANST (Analytical study)
(De novo peptide sequencing in ion trap mass spectrometer with 18O labeling)

L3 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:598066 HCAPLUS
DOCUMENT NUMBER: 127:187862
TITLE: Monoclonal antibody for diagnosis of lung small cell cancer
INVENTOR(S): Aoyagi, Katsuki; Yamaguchi, Ken
PATENT ASSIGNEE(S): Tonen K. K., Japan; Yamaguchi, Ken
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09178742	A2	19970711	JP 1995-341834	19951227
JP 2925479	B2	19990728		

PRIORITY APPLN. INFO.: JP 1995-341834 19951227
AB Disclosed is an immunoassay using monoclonal antibody specific for C-terminal peptide of human gastrin-releasing peptide precursor for

detecting small cell lung cancer-specific peptide in blood or urine.

IT **123202-47-1P**
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal antibody to gastrin-releasing peptide for diagnosis of small cell lung cancer)

L3 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:408477 HCAPLUS
DOCUMENT NUMBER: 125:84117
TITLE: Characterization of a T cell line specific to an anti-Id antibody related to the carbohydrate antigen, sialyl SSEA-1, and the immunodominant T cell antigenic site of the antibody
AUTHOR(S): Tsuyuoka, Kiyotaka; Yao, Kazuhiro; Hirashima, Kunimi; Ando, Shoji; Hanai, Nobuo; Saito, Hiromitsu; Yamasaki, Motoo; Takahashi, Katsustoshi; Fukuda, Yoshihiro; et al.
CORPORATE SOURCE: Research Institute, Aichi Cancer Center, Nagoya, Japan
SOURCE: Journal of Immunology (1996), 157(2), 661-669
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The stage-specific embryonic Ag-1 (SSEA-1) is a carbohydrate Ag and regarded as an onco-developmental Ag. Sialyl SSEA-1 Ag, the sialylated form of SSEA-1, is frequently expressed in human cancer cells as well as in murine cancer cells. A mAb, FH-6, was shown to specifically recognize the Ag. We have generated five anti-Id Abs directed to the paratope-related idiotopes of the FH-6 Ab. One of these anti-Id Abs, Id-F2, increased the survival of host mice that were inoculated with Meth-A cells expressing the sialyl SSEA-1 Ag. To clarify the exact mechanism underlying the antitumor effect of the anti-Id Ab, we established a T cell line that recognized Id-F2 in assocn. with MHC class II mols. The T cell line was CD4+V.beta.8+, and produced IL-2, exhibiting helper activity for B cells. The VH CDR2 region of the Id-F2 amino acid sequences turned out to be strongly immunogenic to T cells. When the immune complexes, consisting of the sialyl SSEA-1 Ag, FH-6, and Id-F2, were formed at the Meth-A cell-surface, the T cell line showed a strong proliferative response. The possible roles played by such T cell subsets in the anti-tumor effect are discussed.

IT **178561-33-6P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process)
(T cell line specific to an anti-Id antibody related to the carbohydrate antigen, sialyl SSEA-1, and the immunodominant T cell antigenic site of the antibody)

L3 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:333020 HCAPLUS
DOCUMENT NUMBER: 125:1367
TITLE: Methods and compositions using oncogene product-binding compounds for cancer therapy and for prognosticating responses to cancer therapy
INVENTOR(S): Bacus, Sarah S.

PATENT ASSIGNEE(S): Becton Dickinson Co., USA
SOURCE: U.S., 22 pp., Cont.-in-part of U.S. Ser. No. 767, 041, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5514554	A	19960507	US 1993-50113	19931007
CA 2096417	AA	19930223	CA 1992-2096417	19920821
WO 9303741	A1	19930304	WO 1992-US7117	19920821
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
EP 656367	A1	19950607	EP 1995-101046	19920821
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
IL 103250	A1	19990312	IL 1992-103250	19920922
US 5288477	A	19940222	US 1993-32529	19930315

PRIORITY APPLN. INFO.:

IL 1991-99284	19910822
US 1991-767041	19910927
US 1991-767042	19910927
WO 1992-US7117	19920821
EP 1992-918871	19920821

AB A method is described for detg. the efficacy of a therapeutic agent, in vitro, for a cancer expressing or over-expressing an oncogene product. The method is particularly useful for detg. the efficacy of therapeutic agents that have a binding affinity for cancer that express HER-2/neu. N24, N28 and N29 monoclonal antibodies are described which have been identified by this method. One or more of these antibodies can be used as a therapeutic agent in the treatment of breast, stomach, ovarian or salivary cancers.

IT **147556-79-4**
RL: PRP (Properties)
(anti-HER-2/neu product monoclonal antibody N29 H chain amino-terminal sequence; oncogene product-binding compds. for cancer therapy and for prognosticating responses to cancer therapy)

L3 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:225671 HCAPLUS
DOCUMENT NUMBER: 118:225671
TITLE: Methods and compositions for cancer therapy and for prognosticating responses to cancer therapy, and monoclonal antibodies specific for the HER-2/neu product
INVENTOR(S): Bacus, Sarah S.; Yarden, Yosef; Sela, Michael
PATENT ASSIGNEE(S): Becton, Dickinson and Co., USA; Yeda Research and Development Co. Ltd.
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9303741	A1	19930304	WO 1992-US7117	19920821
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
CA 2096417	AA	19930223	CA 1992-2096417	19920821
AU 9225182	A1	19930316	AU 1992-25182	19920821
AU 663727	B2	19951019		
EP 554441	A1	19930811	EP 1992-918871	19920821
EP 554441	B1	19990127		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
EP 656367	A1	19950607	EP 1995-101046	19920821
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE				
AT 176328	E	19990215	AT 1992-918871	19920821
ES 2129454	T3	19990616	ES 1992-918871	19920821
IL 103250	A1	19990312	IL 1992-103250	19920922
US 5288477	A	19940222	US 1993-32529	19930315
US 5514554	A	19960507	US 1993-50113	19931007
AU 9511475	A1	19950615	AU 1995-11475	19950130
PRIORITY APPLN. INFO.:			IL 1991-99284	19910822
			US 1991-767041	19910927
			US 1991-767042	19910927
			EP 1992-918871	19920821
			WO 1992-US7117	19920821

AB A method is disclosed for detg. the efficacy of a therapeutic agent in vitro for a cancer expressing or overexpressing an oncogene product. The method is esp. useful for detg. the efficacy of therapeutic agents that have a binding affinity for cancers that express the HER-2/neu product. Also disclosed are monoclonal antibodies, .gtoreq.1 of which can be used as a therapeutic agent in the treatment of breast, stomach, ovarian, or salivary cancers. Monoclonal antibodies (MAbs) to the HER-2/neu product were generated by fusion of NSO myeloma cells with splenocytes of mice immunized with SKBR3 breast cancer cells. Tumorigenic growth of HER2 cells was significantly inhibited in nude mice injected with anti-HER-2/neu product MAb N29. A ricin A-N29 conjugate retarded tumor growth in nude mice injected with HER2 tumor cells. Data indicated that MAbs N29, N24, and N12 induced malignant breast cells to undergo differentiation and exhibit mature phenotypic traits, while MAb N28, which also has specific binding affinity for a portion of the extracellular domain of the HER-2/neu product, actually promoted tumorigenicity in human breast cancer cell line AU-565. Other results indicated that treatment of breast cancer cells with gp30 (a ligand for the HER-2/neu product) either inhibited or accelerated breast cancer cell growth, depending on the concn. of the ligand.

IT **147556-79-4**
RL: BIOL (Biological study)
(monoclonal anti-human HER-2/neu product antibody N29 heavy chain amino-terminal sequence)

L3 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1993:37406 HCAPLUS
DOCUMENT NUMBER: 118:37406
TITLE: Myasthenia gravis: CD4+ T epitopes on the embryonic .gamma. subunit of human muscle

acetylcholine receptor

AUTHOR(S): Protti, Maria Pia; Manfredi, Angelo A.; Wu, Xiao Dong; Moiola, Lucia; Dalton, Mark W. M.; Howard, James F., Jr.; Conti-Tronconi, Bianca M.

CORPORATE SOURCE: Coll. Biol. Sci., Univ. Minnesota, St. Paul, MN, 55108, USA

SOURCE: Journal of Clinical Investigation (1992), 90(4), 1558-67
CODEN: JCINAO; ISSN: 0021-9738

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In myasthenia gravis (MG) an autoimmune response against muscle acetylcholine receptor (AchR) occurs. Embryonic muscle AchR contains a .gamma. subunit, substituted in adult muscle by a homologous .epsilon. subunit. Antibodies and CD4+ cells specific for embryonic AChR have been demonstrated in MG patients. Sequence segments were identified of the human .gamma. subunit forming epitopes recognized by 4 embryonic AchR-specific CD4+ T cell lines, propagated from MG patients' blood by stimulation with synthetic peptides corresponding to the human .gamma. subunit sequence. Each line had an individual epitope repertoire, but two 20-residue sequence regions were recognized by 3 lines of different HLA haplotype. Most T epitope sequences were highly diverged between the .gamma. and the other AChR subunits, confirming the specificity of the T cells for embryonic AChR. These T cells may have been sensitized against AChR expressed by a tissue other than innervated skeletal muscle, possibly the thymus, which expresses an embryonic muscle AChR-like protein, contg. a .gamma. subunit. Several sequence segments forming T epitopes are similar to regions of microbial and/or mammalian proteins unrelated to the AChR. These findings are consistent with the possibility that T cell cross-reactivity between unrelated proteins (mol. mimicry), proposed as a cause of autoimmune responses, is not a rare event.

IT **145151-69-5**
RL: BIOL (Biological study)
(CD4-pos. T-cell epitopes on, of human acetylcholine receptor .gamma.-subunit, myasthenia gravis in relation to)

L3 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:208629 HCAPLUS

DOCUMENT NUMBER: 116:208629

TITLE: Method for preparing a peptide having growth factor activity, a product thereby obtained, and uses thereof as a drug

INVENTOR(S): Barritault, Denis; Courty, Jose; Caruelle, Jean Pierre; Dauchel, Marie Claude; Perderiset, Mylene

PATENT ASSIGNEE(S): Universite Paris-Val de Marne, Fr.

SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202537	A1	19920220	WO 1991-FR627	19910729

W: CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
FR 2665448 A1 19920207 FR 1990-9860 19900801
PRIORITY APPLN. INFO.: FR 1990-9860 19900801

AB A method for obtaining, from biol. fluids, tissues, or cells, a peptide which is different from fibroblast growth factors and has growth factor activity comprises protein extn., cation exchange chromatog., and affinity chromatog. on a column carrying polysaccharide residues. All steps are carried out at a pH close to neutral, and protein extn. is performed in a detergent-free medium, whereby a very high extn. yield can be obtained. The peptide is used as a mitogenic, neurotrophic, or angiogenic agent or as a healing promoter. A peptide named HARP was extd. and purified from bovine brain by chromatog. on Sepharose S Fast Flow, heparin-Sepharose, and Mono S HR 5/5. Sequences for the amino-terminus and 2 tryptic peptides of HARP are shown. HARP showed mitogenic, neurotrophic, angiogenic, and healing-promoting activities.

IT **141099-50-5**
RL: PRP (Properties)
(amino acid sequence of)

L3 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:547475 HCAPLUS
DOCUMENT NUMBER: 113:147475
TITLE: Peptides corresponding to the second repeated sequence in MAP-2 inhibit binding of microtubule-associated proteins to microtubules
AUTHOR(S): Joly, John C.; Purich, Daniel L.
CORPORATE SOURCE: Coll. Med., Univ. Florida, Gainesville, FL, 32610, USA
SOURCE: Biochemistry (1990), 29(38), 8916-20
CODEN: BICHAW; ISSN: 0006-2960
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Bovine brain high-mol.-wt. microtubule-assocd. proteins (MAPs) can be displaced from assembled tubules by peptides corresponding to the 2nd of 3 nonidentical repeated sequences in mouse MAP-2. The octadecapeptide m2 (VTSKCGSLKNIRHRPGGG) can release MAP-1b from MAP-contg. microtubules, and the extended 2nd-sequence peptide m2' (VTSKCGSLKNIRHRPGGGRVK) displaces MAP-1a and MAP-1b as well as MAP-2a and MAP-2b. Peptides m2 and m2' stimulate tubulin polymn. in the absence of MAPs or microtubule-stabilizing agents, and m2' acts as a competitive inhibitor or radiolabeled MAP-2 binding. The dissocn. const. for MAP-2 binding to taxol-stabilized tubules was 3.4 .mu.M in the absence of m2' and 14 .mu.M in the presence of a 1.5 mM aliquot of this peptide. Inhibition const. for peptide m2' is .apprx.0.5 mM, .apprx.100-fold lower than for the Km of MAP-2. These observations suggest that the 2nd repeated sequence in MAP-2 may represent an important recognition site for MAP binding to microtubules and that other structural features within MAP-2 may reinforce the strength of MAP-microtubule interactions.

IT **123947-06-8 129104-23-0**
RL: BIOL (Biological study)
(microtubule-assocd. high-mol.-wt. proteins binding by microtubules response to, recognition site in relation to)

L3 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1989:627508 HCAPLUS
DOCUMENT NUMBER: 111:227508
TITLE: The microtubule-binding fragment of microtubule-associated protein-2: location of the protease-accessible site and identification of an assembly-promoting peptide
AUTHOR(S): Joly, John C.; Flynn, Gregory; Purich, Daniel L.
CORPORATE SOURCE: Coll. Med., Univ. Florida, Gainesville, FL, 32610, USA
SOURCE: Journal of Cell Biology (1989), 109(5), 2289-94
CODEN: JCLBA3; ISSN: 0021-9525
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Thrombin cleavage of bovine brain microtubule-assocd. protein (MAP-2) yields 2 stable limit polypeptide fragments (28,000 and 240,000 Mr). The smaller cleavage product contains the microtubule-binding domain and is derived from the C terminus of MAP-2 while the 240,000 Mr fragment is derived from the N terminus. The N-terminal sequence of the smaller cleavage product is homologous with the microtubule-binding fragment of tau in sequence and in a similar location relative to 3 imperfect octadecapeptide repeats implicated in microtubule binding. Peptides corresponding to the cleavage site and the 3 repeats of MAP-2 were synthesized. Only the 2nd octadecapeptide repeat (VTSKCGSLKNIRHRPGGG) was capable of stimulating microtubule nucleation and elongation. Microtubules formed in the presence of this peptide displayed normal morphol. and retained the inhibition properties of Ca ion, podophyllotoxin, and colchicine. Apparently, a region comprising only .apprx.1% of the MAP-2 sequence can promote microtubule assembly.

IT **123947-06-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and microtubule assembly promotion by)

L3 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1989:567761 HCAPLUS
DOCUMENT NUMBER: 111:167761
TITLE: Bombesin-like peptides as regulators of gastric function
AUTHOR(S): Walsh, John H.; Kovacs, Thomas O. G.; Maxwell, Vernon; Cuttitta, Frank
CORPORATE SOURCE: Cent. Ulcer Res. Educ., Veterans Adm. Wadsworth Med. Cent., Los Angeles, CA, 90073, USA
SOURCE: Annals of the New York Academy of Sciences (1988), 547(Bombesin-Like Pept. Health Dis.), 217-24
CODEN: ANYAA9; ISSN: 0077-8923
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB The biol. actions of bombesin and gastrin-releasing peptide (GRP) on the stomach are described including the stimulation of gastrin release and stomach acid secretion and the inhibition of gastric emptying. The effects of the GRP-gene-assocd. peptides (GGAPs) on gastric acid secretion and gastrin release were investigated in dogs. The GGAps studied (Y-24-Q, S-22I, and Y-18-S) had no effect on either gastric acid secretion or gastrin release. Apparently these GGAP fragments have no stimulatory activity on basal gastric function.

IT **123202-47-1**

RL: BIOL (Biological study)
(gastrin release and stomach acid secretion response to)

L3 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:620303 HCAPLUS
DOCUMENT NUMBER: 95:220303
TITLE: High yield coupling of peptides to protein carriers
AUTHOR(S): Atassi, M. Zouhair; Kazim, A. Latif; Sakata, Shigeki
CORPORATE SOURCE: Dep. Immunol., Mayo Med. Sch., Rochester, MN, 55901, USA
SOURCE: Biochimica et Biophysica Acta (1981), 670(2), 300-2
CODEN: BBACAQ; ISSN: 0006-3002
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The carbonyl side chains of succinylated bovine serum albumin were esterified with p-O2NC6H4OH by DCC, and the resulting protein active esters were condensed with the amino groups of peptides to give succinyl albumin-peptide conjugates with high levels of peptide incorporation (17.7-37.7 mol peptide/mol albumin). The reaction avoided the formation of polymeric forms of peptide, protein, or conjugate.
IT **67812-92-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(coupling of, with succinylated serum albumin nitrophenyl ester)
IT **67812-92-4DP**, succinylated serum albumin conjugate
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of)

L3 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1978:595237 HCAPLUS
DOCUMENT NUMBER: 89:195237
TITLE: Structural studies on induced antibodies with defined idiotypic specificities. VI. Amino terminal sequences of the heavy and light chain variable regions of anti-p-azophenylarsonate antibodies from A/J mice suppressed for a cross-reactive idiotype
AUTHOR(S): Capra, J. Donald; Ju, Shyr-Te; Nisonoff, Alfred
CORPORATE SOURCE: Dep. Microbiol., Univ. Texas Health Sci. Cent., Dallas, TX, USA
SOURCE: Journal of Immunology (1978), 121(3), 953-7
CODEN: JOIMA3; ISSN: 0022-1767
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The heavy and light chain variable region structures of antibodies raised in A/J mice to the p-azophenylarsonate (Ar) hapten, certain of which bear a cross-reacting idiotype, have been examd. An anal. of anti-Ar antibodies that arise in A/J mice suppressed for a cross-reacting idiotype was done. The results indicate that when an idiotype is suppressed and the animal subsequently hyperimmunized, the resultant antibodies are deviated into different variable (V) region subgroups , both in the heavy and light polypeptide chain.
IT **68293-01-6**
RL: BIOL (Biological study)
(of Ig heavy chain hypervariable region of phenylarsonate-

specific idiotype)

L3 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1978:544838 HCAPLUS
DOCUMENT NUMBER: 89:144838
TITLE: Antibody-combining sites can be mimicked synthetically. Surface-simulation synthesis of the immunoglobulin New combining site to the .gamma.-hydroxyl derivative of vitamin K1
AUTHOR(S): Twining, Sally S.; Atassi, M. Zouhair
CORPORATE SOURCE: Dep. Immunol., Mayo Med. Sch., Rochester, MN, USA
SOURCE: Journal of Biological Chemistry (1978), 253(15), 5259-62
CODEN: JBCHA3; ISSN: 0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Surface-simulation synthesis, by which the spatially adjacent residues constituting a protein binding site are linked directly via peptide bonds, with appropriate spacers, into a single peptide which does not exist in the native protein but mimics a surface region of it was used to examine whether an antibody-combining site can be reconstructed. The myeloma protein IgG New, which binds a hydroxyl deriv. of vitamin K1 (Vit. K1OH) was chosen to test this idea. The combining site residues (Ile-100 H, Ala-101 H, Asn-30 L, Tyr-90 L, Ser-93 L, Leu-94 L, Arg-95 L, Trp-47 H, Tyr-50 H, Tyr-33 H) were directly linked by peptide bonds, with appropriate intervening spacers. Two peptides were synthesized which mimicked the combining site but differed in the absence (peptide A) or presence (peptide B) of a spacer between Tyr-90 L and Ser-93 L. Also, a control peptide was synthesized having exactly the same amino acids as peptide B but which were in a different random sequence. Peptides A and B showed remarkable binding activity towards Vit. K1OH while the control peptide exhibited no binding activity. Peptide B, approximating more closely the correct spatial sepn. between the side chains, had a higher binding activity than peptide A. Inhibition studies confirmed the specificity of the binding between Vit. K1OH and peptides A or B. Thus, a complex binding site, that of an antibody-combining site, can be successfully mimicked by surface-simulation synthesis.
IT **67812-92-4**
RL: BIOL (Biological study)
(hydroxyvitamin K1 binding by, antibody combining site in relation to)

E1 THROUGH E24 ASSIGNED

FILE 'REGISTRY' ENTERED AT 09:51:29 ON 10 FEB 2003
L4 24 SEA FILE=REGISTRY ABB=ON PLU=ON (359664-87-2/BI OR 359665-57-9/BI OR 67812-92-4/BI OR 123202-47-1/BI OR 123947-06-8/BI OR 147556-79-4/BI OR 359681-04-2/BI OR 359682-03-4/BI OR 129104-23-0/BI OR 141099-50-5/BI OR 145151-69-5/BI OR 178561-33-6/BI OR 205585-84-8/BI OR 218135-73-0/BI OR 261622-78-0/BI OR 321870-10-4/BI OR 321870-65-9/BI OR 345223-13-4/BI OR 359680-57-2/BI OR 359681-93-9/BI OR 372483-84-6/BI OR 395114-02-0/BI OR 395114-33-7/BI OR 68293-01-6/BI)

L5 24 L4 AND L1

L5 ANSWER 1 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **395114-33-7** REGISTRY
CN L-Alanine, glycyl-L-seryl-L-leucyl-L-lysyl-L-asparaginyl-L-serylglycyl-L-threonyl-L-isoleucyl-L-alanylglycyl-L-arginyl-L-asparaginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4318: PN: WO0131019 PAGE: 811 claimed protein
SQL **14**

SEQ 1 GSLKNSGTIA GRNA
====
HITS AT: 1-4

REFERENCE 1: 136:166060

L5 ANSWER 2 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **395114-02-0** REGISTRY
CN L-Asparagine, L-threonyl-L-.alpha.-aspartyl-L-threonyl-L-alanyl-L-.alpha.-glutamyl-L-arginyl-L-histidyl-L-serylglycyl-L-seryl-L-leucyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4265: PN: WO0131019 PAGE: 810 claimed protein
SQL **13**

SEQ 1 TDTAERHSGS LKN
== ==
HITS AT: 9-12

REFERENCE 1: 136:166060

L5 ANSWER 3 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **372483-84-6** REGISTRY
CN L-Leucine, L-.alpha.-glutamyl-L-valyl-L-methionyl-L-leucyl-L-valyl-L-.alpha.-glutamyl-L-serylglycylglycylglycyl-L-leucyl-L-valyl-L-lysyl-L-prolylglycylglycyl-L-seryl-L-leucyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4: PN: WO0183560 SEQID: 4 unclaimed sequence
SQL **20**

SEQ 1 EVMLVESGGG LVKPGGSLKL
====
HITS AT: 16-19

REFERENCE 1: 135:356769

L5 ANSWER 4 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **359682-03-4** REGISTRY
CN L-Asparagine, glycyl-L-seryl-L-leucyl-L-lysyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4380: PN: WO0131019 PAGE: 813 claimed protein
SQL **5**

SEQ 1 GSLKN
====
HITS AT: 1-4

REFERENCE 1: 136:166060

REFERENCE 2: 135:240910

L5 ANSWER 5 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **359681-93-9** REGISTRY
CN L-Asparagine, glycyl-L-seryl-L-leucyl-L-lysyl-L-asparaginyl-L-.alpha.-glutamyl-L-threonyl-L-serylglycyl-L-threonyl-L-isoleucyl-L-.alpha.-glutamyl-L-alanyl-L-alanyl-L-arginyl-L-leucyl-L-alanyl-L-isoleucyl-L-.alpha.-aspartyl-L-threonyl-L-.alpha.-aspartyl-L-threonyl-L-leucyl-L-asparaginyl- (9CI) (CA INDEX NAME)
SQL **25**

SEQ 1 GSLKNETSGT IEAARLAIDT DTLNN
====
HITS AT: 1-4

REFERENCE 1: 135:240910

L5 ANSWER 6 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **359681-04-2** REGISTRY
CN L-Threonine, L-leucyl-L-seryl-L-threonyl-L-arginylglycyl-L-seryl-L-leucyl-L-lysyl-L-asparaginyl-L-seryl-L-histidyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 4296: PN: WO0131019 PAGE: 811 claimed protein
SQL **12**

SEQ 1 LSTRGSLKNS HT
====
HITS AT: 5-8

REFERENCE 1: 136:166060

REFERENCE 2: 135:240910

L5 ANSWER 7 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **359680-57-2** REGISTRY
CN L-Asparagine, L-threonyl-L-.alpha.-aspartyl-L-threonyl-L-alanyl-L-.alpha.-glutamyl-L-arginyl-L-histidyl-L-serylglycyl-L-seryl-L-leucyl-L-lysyl-L-asparaginyl-L-threonyl-L-phenylalanyl- (9CI) (CA INDEX NAME)
SQL **16**

SEQ 1 TDTAERHSGS LKNTFN
== ==
HITS AT: 9-12

REFERENCE 1: 135:240910

L5 ANSWER 8 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **359665-57-9** REGISTRY
CN L-Alanine, glycyl-L-seryl-L-leucyl-L-lysyl-L-.alpha.-aspartyl-L-valyl-L-arginyl- (9CI) (CA INDEX NAME)

OTHER NAMES:
CN 2696: PN: WO0131019 PAGE: 774 claimed protein
CN 592: PN: WO0131019 PAGE: 476 claimed protein
SQL **8**

SEQ 1 GSLKDVRA
====
HITS AT: 1-4

REFERENCE 1: 136:166060

REFERENCE 2: 136:84685

REFERENCE 3: 135:240910

L5 ANSWER 9 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **359664-87-2** REGISTRY
CN L-Alanine, L-seryl-L-threonyl-L-alanyl-L-arginyl-L-leucyl-L-serylglycyl-L-seryl-L-leucyl-L-lysyl-L-.alpha.-aspartyl-L-valyl-L-arginyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2628: PN: WO0131019 PAGE: 772 claimed protein
CN 524: PN: WO0131019 PAGE: 475 claimed protein
SQL **14**

SEQ 1 STARLSGSLK DVRA
====
HITS AT: 7-10

REFERENCE 1: 136:166060

REFERENCE 2: 136:84685

REFERENCE 3: 135:240910

L5 ANSWER 10 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **345223-13-4** REGISTRY
CN L-Aspartic acid, L-methionyl-L-arginyl-L-tyrosyl-L-tyrosyl-L-.alpha.-glutamylglycyl-L-seryl-L-leucyl-L-lysyl-L-seryl-L-tyrosyl-L-prolyl- (9CI) (CA INDEX NAME)
SQL **13**

SEQ 1 MRYYEGSLKS YPD
====
HITS AT: 6-9

REFERENCE 1: 135:46424

L5 ANSWER 11 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **321870-65-9** REGISTRY
CN L-Glutamic acid, glycyl-L-seryl-L-leucyl-L-lysyl-L-.alpha.-aspartyl-L-asparaginyl-L-leucyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 402: PN: WO0131019 PAGE: 356 claimed protein
CN 538: PN: WO0104316 PAGE: 50 claimed sequence
SQL **8**

SEQ 1 GSLKDNLE

```
          ====
HITS AT:    1-4

REFERENCE   1:  136:4714

REFERENCE   2:  134:126821

L5   ANSWER 12 OF 24  REGISTRY  COPYRIGHT 2003 ACS
RN   321870-10-4  REGISTRY
CN   L-Glutamic acid, L-valyl-L-asparaginylglycylglycyl-L-seryl-L-leucyl-
     L-lysyl-L-.alpha.-aspartyl-L-asparaginyl-L-leucyl- (9CI)  (CA INDEX
     NAME)
OTHER NAMES:
CN   385: PN: WO0131019 PAGE: 356 claimed protein
CN   506: PN: WO0104316 PAGE: 49 claimed sequence
SQL  11

SEQ      1 VNGGSLKDNL E
             ====
HITS AT:    4-7

REFERENCE   1:  136:4714

REFERENCE   2:  134:126821

L5   ANSWER 13 OF 24  REGISTRY  COPYRIGHT 2003 ACS
RN   261622-78-0  REGISTRY
CN   L-Threonine, L-leucyl-L-valylglycyl-L-isoleucyl-L-.alpha.-
     glutamylglycyl-L-seryl-L-leucyl-L-lysylglycyl-L-seryl- (9CI)  (CA
     INDEX NAME)
SQL  12

SEQ      1 LVGIEGSLKG ST
               ====
HITS AT:    6-9

REFERENCE   1:  132:221073

L5   ANSWER 14 OF 24  REGISTRY  COPYRIGHT 2003 ACS
RN   218135-73-0  REGISTRY
CN   L-Alanine, L-.alpha.-glutamyl-L-threonyl-L-tryptophyl-L-glutaminyl-L-
     .alpha.-glutamylglycyl-L-seryl-L-leucyl-L-lysyl- (9CI)  (CA INDEX
     NAME)
SQL  10

SEQ      1 ETWQEGSLKA
               ====
HITS AT:    6-9

REFERENCE   1:  130:64994

L5   ANSWER 15 OF 24  REGISTRY  COPYRIGHT 2003 ACS
RN   205585-84-8  REGISTRY
CN   L-Lysine, L-asparaginyl-L-leucyl-L-leucyl-L-leucylglycyl-L-leucyl-L-
     .alpha.-aspartylglycyl-L-seryl-L-leucyl- (9CI)  (CA INDEX NAME)
SQL  11

SEQ      1 NLLLGLDGSL K
```

                    === =
HITS AT: 8-11

REFERENCE 1: 128:267916

L5 ANSWER 16 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **178561-33-6** REGISTRY
CN L-Serine, L-valyl-L-glutaminyl-L-leucyl-L-.alpha.-glutamyl-L-.alpha.-glutamyl-L-serylglycylglycylglycyl-L-leucyl-L-valyl-L-lysyl-L-prolylglycylglycyl-L-seryl-L-leucyl-L-lysyl-L-leucyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 VQLEESGGGL VKPGGSLKLS
                    ====
HITS AT: 15-18

REFERENCE 1: 125:84117

L5 ANSWER 17 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **147556-79-4** REGISTRY
CN L-Leucine, L-.alpha.-glutamyl-L-valyl-L-glutaminyl-L-leucyl-L-valyl-L-.alpha.-glutamyl-L-serylglycylglycylglycyl-L-leucyl-L-valyl-L-glutaminyl-L-prolyl-L-lysylglycyl-L-seryl-L-leucyl-L-lysyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 EVQLVESGGG LVQPKGSLKL
                    ====
HITS AT: 16-19

REFERENCE 1: 125:1367

REFERENCE 2: 118:225671

L5 ANSWER 18 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **145151-69-5** REGISTRY
CN L-Alanine, L-lysylglycyl-L-prolyl-L-.alpha.-glutamyl-L-leucylglycyl-L-leucyl-L-seryl-L-glutaminyl-L-phenylalanyl-L-cysteinylglycyl-L-seryl-L-leucyl-L-lysyl-L-glutaminyl-L-alanyl-L-alanyl-L-prolyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 KGPELGLSQF CGSLKQAAPA
                  ====
HITS AT: 12-15

REFERENCE 1: 118:37406

L5 ANSWER 19 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **141099-50-5** REGISTRY
CN L-Tryptophan, L-seryl-L-lysyl-L-prolyl-L-glutaminyl-L-alanyl-L-.alpha.-glutamyl-L-seryl-L-tryptophylglycyl-L-seryl-L-leucyl-L-lysyl-L-seryl-L-cysteinyl-L-.alpha.-aspartylglycyl-L-.alpha.-glutamyl- (9CI) (CA INDEX NAME)
SQL **18**

SEQ 1 SKPQAESWGS LKSCDGEW

== ==
HITS AT: 9-12

REFERENCE 1: 116:208629

L5 ANSWER 20 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **129104-23-0** REGISTRY
CN L-Lysine, L-valyl-L-threonyl-L-seryl-L-lysyl-L-cysteinylglycyl-L-seryl-L-leucyl-L-lysyl-L-asparaginyl-L-isoleucyl-L-arginyl-L-histidyl-L-arginyl-L-prolylglycylglycylglycyl-L-arginyl-L-valyl- (9CI) (CA INDEX NAME)
SQL **21**

SEQ 1 VTSKCGSLKN IRHRPGGGRV K
====
HITS AT: 6-9

REFERENCE 1: 113:147475

L5 ANSWER 21 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **123947-06-8** REGISTRY
CN Glycine, L-valyl-L-threonyl-L-seryl-L-lysyl-L-cysteinylglycyl-L-seryl-L-leucyl-L-lysyl-L-asparaginyl-L-isoleucyl-L-arginyl-L-histidyl-L-arginyl-L-prolylglycylglycyl- (9CI) (CA INDEX NAME)
SQL **18**

SEQ 1 VTSKCGSLKN IRHRPGGG
====
HITS AT: 6-9

REFERENCE 1: 113:147475

REFERENCE 2: 111:227508

L5 ANSWER 22 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **123202-47-1** REGISTRY
CN L-Isoleucine, L-seryl-L-threonylglycyl-L-.alpha.-glutamyl-L-seryl-L-seryl-L-seryl-L-valyl-L-seryl-L-.alpha.-glutamyl-L-arginylglycyl-L-seryl-L-leucyl-L-lysyl-L-glutaminyl-L-glutaminyl-L-leucyl-L-arginyl-L-.alpha.-glutamyl-L-tyrosyl- (9CI) (CA INDEX NAME)
SQL **22**

SEQ 1 STGESSSVSE RGSLKQQLRE YI
====
HITS AT: 12-15

REFERENCE 1: 127:187862

REFERENCE 2: 111:167761

L5 ANSWER 23 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **68293-01-6** REGISTRY
CN L-Leucine, L-.alpha.-glutamyl-L-valyl-L-lysyl-L-leucyl-L-leucyl-L-.alpha.-glutamyl-L-serylglycylglycylglycyl-L-leucyl-L-valyl-L-glutaminyl-L-prolylglycylglycyl-L-seryl-L-leucyl-L-lysyl- (9CI) (CA INDEX NAME)
SQL **20**

SEQ 1 EVKLLESGGG LVQPGGSLKL
====

HITS AT: 16-19

REFERENCE 1: 89:195237

L5 ANSWER 24 OF 24 REGISTRY COPYRIGHT 2003 ACS
RN **67812-92-4** REGISTRY
CN L-Tyrosine, L-isoleucyl-L-alanylglycyl-L-asparaginylglycyl-L-tyrosylglycyl-L-seryl-L-leucyl-L-lysylglycyl-L-tryptophylglycyl-L-tyrosylglycyl- (9CI) (CA INDEX NAME)
SQL **16**

SEQ 1 IAGNGYGSLK GWGYGY
====

HITS AT: 7-10

REFERENCE 1: 95:220303

REFERENCE 2: 89:144838

FILE 'HOME' ENTERED AT 09:54:11 ON 10 FEB 2003

GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: February 6, 2003, 14:11:20 ; Search time 29 Seconds
(without alignments)
142.101 Million cell updates/sec

Title: US-10-038-612-73
Perfect score: 104
Sequence: 1 MEFLPSGSLKEYLPKNKNKI 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 9297

Minimum DB seq length: 0
Maximum DB seq length: 25

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : SPTREMBL_21:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_rvirus:*

16: sp_bacteriap:*
17: sp_archeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	34	32.7	25	13	Q9PWS0	Q9pws0 xiphophorus
2	32	30.8	24	13	P82904	P82904 rana spheno
3	32	30.8	24	13	P82837	P82837 rana berlan
4	31	29.8	24	13	P82905	P82905 rana spheno
5	30	28.8	24	13	P82833	P82833 rana berlan
6	30	28.8	24	13	P82834	P82834 rana berlan
7	29	27.9	14	2	Q45876	Q45876 clostridium
8	29	27.9	14	2	Q45872	Q45872 clostridium
9	29	27.9	19	4	Q96FA2	Q96fa2 homo sapien
10	29	27.9	24	13	P82835	P82835 rana berlan
11	29	27.9	24	13	P82836	P82836 rana berlan
12	29	27.9	24	13	P82838	P82838 rana berlan
13	28	26.9	8	4	Q15901	Q15901 homo sapien
14	28	26.9	18	13	Q9PRR7	Q9prr7 gallus gall
15	27	26.0	12	8	Q9XNR6	Q9xnr6 pylaiella l
16	27	26.0	18	6	Q9TRG0	Q9trg0 bos taurus
17	27	26.0	18	15	Q78375	Q78375 human immun
18	27	26.0	20	6	Q9TRU5	Q9tru5 oryctolagus
19	27	26.0	22	2	Q9R5C0	Q9r5c0 nitrosomona
20	27	26.0	23	16	Q8Z974	Q8z974 salmonella
21	26.5	25.5	14	10	P82339	P82339 pisum sativ
22	26	25.0	17	4	O95794	O95794 homo sapien
23	26	25.0	18	6	Q9TQR0	Q9tqr0 sus scrofa
24	26	25.0	19	11	Q62996	Q62996 rattus norv
25	26	25.0	23	2	Q43887	Q43887 anabaena az
26	26	25.0	24	11	Q8R4R8	Q8r4r8 mus musculu
27	26	25.0	25	6	Q95L28	Q95l28 canis famil
28	25.5	24.5	16	3	P79034	P79034 emericella
29	25	24.0	13	8	Q9THS3	Q9ths3 bryopsis sp
30	25	24.0	13	8	Q9THS2	Q9ths2 bryopsis sp
31	25	24.0	13	8	Q9TKG6	Q9tkg6 lambia anta
32	25	24.0	13	8	Q95925	Q95925 porphyra pu
33	25	24.0	13	8	Q9T4K6	Q9t4k6 bryopsis sp

ALIGNMENTS

RESULT 1
Q9PWS0
ID Q9PWS0 PRELIMINARY; PRT; 25 AA.
AC Q9PWS0;
DT 01-MAY-2000 (TrEMBLrel. 13, Created)
DT 01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT 01-MAR-2002 (TrEMBLrel. 20, Last annotation update)
DE Melanoma receptor tyrosine kinase (Fragment).
OS Xiphophorus maculatus (Southern platyfish).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
OC Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha;
OC Cyprinodontiformes; Poeciliidae; Xiphophorus.
OX NCBI_TaxID=8083;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=RIO JAMAPA;
RX MEDLINE=99132631; PubMed=9931413;
RA Schartl M., Wilde B., Hornung U.;
RT "Triplet repeat variability in the signal peptide sequence of the Xmrk
RT receptor tyrosine kinase gene in Xiphophorus fish.";
RL Gene 224:17-21(1998).
DR EMBL; U82797; AAD10116.1; -.
KW Kinase; Receptor.
FT NON_TER 25 25
SQ SEQUENCE 25 AA; 2620 MW; 9666054361746350 CRC64;

Query Match 32.7%; Score 34; DB 13; Length 25;
Best Local Similarity 75.0%; Pred. No. 2.6e+02;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

```
Qy      1 MEFLPSGS 8
          ||||| |:
Db      1 MEFLPGGA 8
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Search completed: February 6, 2003, 14:13:57
Job time : 53 secs

GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: February 6, 2003, 14:08:45 ; Search time 11 Seconds
(without alignments)
75.412 Million cell updates/sec

Title: US-10-038-612-73
Perfect score: 104
Sequence: 1 MEFLPSGSLKEYLPKNKNKI 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 1520

Minimum DB seq length: 0
Maximum DB seq length: 25

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	31	29.8	16	1	CFAB_BOVIN	P81187 bos taurus
2	28	26.9	17	1	PH4_PERAM	P82697 periplaneta
3	27	26.0	13	1	RPOC_MYCGA	P47716 mycoplasma
4	26	25.0	16	1	MMPX_SOLTU	P80501 solanum tub
5	26	25.0	20	1	COG4_CHIOP	P34156 chionoecete

6	26	25.0	23	1	NIFD_ANASL	P33177 anabaena sp
7	24	23.1	24	1	PSAN_CUCSA	P42053 cucumis sat
8	24	23.1	24	1	RS19_PHYS2	O66096 phytoplasma
9	24	23.1	25	1	LACS_LACSL	P23826 lactobacill
10	23	22.1	20	1	TL14_SPIOL	P82682 spinacia ol
11	23	22.1	22	1	MOTI_CHICK	Q9prp6 gallus gall
12	23	22.1	24	1	GAE6_RANRU	P80400 rana rugosa
13	23	22.1	25	1	LYC_ASTRU	P37715 asterias ru
14	23	22.1	25	1	RS19_ACHLA	P29224 acholeplasm
15	22	21.2	18	1	PCG6_PACGO	P82419 pachycondyl
16	22	21.2	19	1	PCG7_PACGO	P82420 pachycondyl
17	22	21.2	24	1	RS13_THETH	P80377 thermus the
18	21.5	20.7	22	1	MOTI_CANFA	P19863 canis famil
19	21	20.2	14	1	SODN_STRGR	P80732 streptomyce
20	21	20.2	15	1	ECDA_LYMDI	P80938 lymantria d
21	21	20.2	19	1	FIBA_RANTA	P14462 rangifer ta
22	21	20.2	19	1	ITHA_PERAM	P19986 periplaneta
23	21	20.2	20	1	MI17_BOVIN	P35451 bos taurus
24	21	20.2	20	1	SCB1_CANFA	P99507 canis famil
25	21	20.2	20	1	YPRB_SERMA	P22581 serratia ma
26	21	20.2	22	1	LP1_TRIWA	P24335 trimeresuru
27	21	20.2	22	1	LP2_TRIWA	P58930 trimeresuru
28	21	20.2	23	1	VG22_BPT2	P21596 bacteriopha
29	21	20.2	23	1	VG22_BPT6	P21597 bacteriopha
30	21	20.2	25	1	ATP0_SPIOL	P80082 spinacia ol
31	21	20.2	25	1	CHLY_CARPA	P81241 carica papa
32	20	19.2	15	1	CKX_WHEAT	P58763 triticum ae
33	20	19.2	15	1	FIBA_SYNCA	P14463 syncerus ca
34	20	19.2	16	1	DBH3_RHILE	P80605 rhizobium l
35	20	19.2	16	1	FIBA_HYLLA	P14453 hylobates l
36	20	19.2	16	1	FIBA_MELME	P14456 meles meles
37	20	19.2	16	1	FIBA_ODOHE	P14459 odocoileus
38	20	19.2	16	1	FIBA_TAPTE	P14536 tapirus ter
39	20	19.2	16	1	PA21_TRIST	P82892 trimeresuru
40	20	19.2	17	1	FIBA_PIG	P14460 sus scrofa
41	20	19.2	18	1	FIBA_CAMDR	P14444 camelus dro
42	20	19.2	18	1	FIBA_LAMGL	P14454 lama glama
43	20	19.2	19	1	FIBA_BUBBU	P14442 bubalus bub
44	20	19.2	19	1	FIBA_CERNI	P14447 cervus nipp
45	20	19.2	19	1	FIBA_MUNMU	P14457 muntiacus m
46	20	19.2	19	1	FIBA_SHEEP	P14451 ovis aries
47	20	19.2	20	1	BULB_NARPS	P80554 narcissus p
48	20	19.2	20	1	CP35_PAPSP	P80056 papio sp. (
49	20	19.2	20	1	CS21_STRTR	P81621 streptococc
50	20	19.2	20	1	PYRR_PYRAP	P37362 pyrrhocoris

ALIGNMENTS

RESULT 1
CFAB_BOVIN
ID CFAB_BOVIN STANDARD; PRT; 16 AA.
AC P81187;
DT 15-JUL-1998 (Rel. 36, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Complement factor B (EC 3.4.21.47) (C3/C5 convertase) (EC-VMFB)
DE (Fragment).
GN BF.
OS Bos taurus (Bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE.
RC TISSUE=Blood;
RX MEDLINE=97428195; PubMed=9281322;
RA Cai G., Satoh T., Hoshi H.;
RT "Isolation from fetal bovine serum of a fragment b of complement
RT factor B-like protein improving a long-term survival of human
RT endothelial cells.";
RL Arch. Biochem. Biophys. 345:150-155(1997).
CC -!- FUNCTION: FACTOR B WHICH IS PART OF THE ALTERNATE PATHWAY OF
THE
CC COMPLEMENT SYSTEM IS CLEAVED BY FACTOR D INTO 2 FRAGMENTS: BA
AND
CC BB. BB, A SERINE PROTEASE, THEN COMBINES WITH COMPLEMENT
FACTOR 3B
CC TO GENERATE THE C3 OR C5 CONVERTASE.
CC -!- CATALYTIC ACTIVITY: Cleaves C3 in the alpha-chain to yield C3a and
CC C3b. Cleaves C5 in the alpha-chain to yield C5a and C5b. Both
CC cleavages take place at the C-terminal of an arginine residue.
CC -!- SUBUNIT: MONOMER.
CC -!- MISCELLANEOUS: FACTOR B IS A MAJOR HISTOCOMPATIBILITY COMPLEX
CC CLASS-III PROTEIN.
CC -!- SIMILARITY: BELONGS TO PEPTIDASE FAMILY S1.
DR InterPro; IPR001254; Ser_protease_Try.
DR PROSITE; PS50240; TRYPSIN_DOM; PARTIAL.
DR PROSITE; PS00134; TRYPSIN_HIS; PARTIAL.
DR PROSITE; PS00135; TRYPSIN_SER; PARTIAL.

KW Complement alternate pathway; Plasma; Hydrolase; Serine protease;
KW Glycoprotein; Zymogen.
FT CHAIN 1 >16 BB FRAGMENT.
FT NON_TER 16 16
SQ SEQUENCE 16 AA; 1762 MW; 75FF5D7F5A6A92F0 CRC64;

Query Match 29.8%; Score 31; DB 1; Length 16;
Best Local Similarity 66.7%; Pred. No. 74;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 5 PSGSLKEYL 13
|||| : ||
Db 6 PSGSMNIYL 14

Search completed: February 6, 2003, 14:13:24
Job time : 38 secs

GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: February 6, 2003, 14:11:45 ; Search time 14 Seconds
(without alignments)
137.335 Million cell updates/sec

Title: US-10-038-612-73
Perfect score: 104
Sequence: 1 MEFLPSGSLKEYLPKNKNKI 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 4984

Minimum DB seq length: 0
Maximum DB seq length: 25

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	31	29.8	13	2	S14316	photosystem I 9K c

2	29	27.9	14	2	S58862	botulinum neurotox
3	29	27.9	14	2	S58866	botulinum neurotox
4	29	27.9	21	2	S23361	protein-tyrosine k
5	28	26.9	15	2	PL0110	complement factor
6	27	26.0	14	2	S27140	hypothetical prote
7	27	26.0	23	2	AF0535	hypothetical prote
8	25	24.0	14	2	S50900	chlorophyll a/b-bi
9	25	24.0	16	2	A28144	ribosomal protein
10	25	24.0	16	2	B36300	T-cell receptor de
11	25	24.0	20	2	A60728	cytochrome P450 3A
12	25	24.0	20	2	S67990	neurotoxin-associa
13	25	24.0	23	2	PH1726	Ig heavy chain V r
14	25	24.0	23	2	B60691	phycobilisome 29K
15	25	24.0	23	2	PH0858	MauD protein - Par
16	24	23.1	9	2	JP0073	ribosomal protein
17	24	23.1	13	2	E39778	lactose phosphotra
18	24	23.1	20	2	A41439	acid ribonuclease
19	24	23.1	22	2	H86433	protein T17H7.9 [i
20	24	23.1	23	2	A60996	complement C3 - bo
21	24	23.1	24	2	D56819	PS I complex subun
22	23	22.1	11	2	PH1584	Ig H chain V-D-J r
23	23	22.1	18	2	S48862	murine cyclin H -
24	23	22.1	20	2	A56894	intracrystalline c
25	23	22.1	22	2	S32462	hydantoinase - Agr
26	23	22.1	22	2	PQ0697	hemagglutinin [imp
27	23	22.1	22	2	S55308	glutathione transf
28	23	22.1	24	2	PC2305	gaegurin 6 - Korea
29	23	22.1	24	2	T08160	S locus-linked pro
30	23	22.1	24	2	T50123	peroxisomal target
31	23	22.1	25	2	E41839	ribosomal protein
32	23	22.1	25	2	T09001	hypothetical prote
33	23	22.1	25	2	A11762	lysozyme (EC 3.2.1
34	23	22.1	25	2	S39360	CDK inhibitor - mo
35	22	21.2	10	2	H60588	sperm-activating p
36	22	21.2	12	2	A53524	ubiquinol-cytochro
37	22	21.2	13	2	S63492	dissimilatory sulf
38	22	21.2	15	2	PA0086	protein QF200044 -
39	22	21.2	16	2	A45133	casein kinase II (
40	22	21.2	17	2	C43599	hypothetical prote
41	22	21.2	19	2	A60422	VLDV-neurophysin -
42	22	21.2	20	2	PU0033	aldose 1-epimerase
43	22	21.2	21	2	S22875	TyA protein - yeas
44	22	21.2	21	2	S35676	protein kinase - r
45	22	21.2	23	2	S70327	gamma70 secalin -
46	22	21.2	24	2	S51064	ribosomal protein

ALIGNMENTS

RESULT 1
S14316
photosystem I 9K chain - spinach (fragment)
C;Species: Spinacia oleracea (spinach)
C;Date: 19-Mar-1997 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998
C;Accession: S14316
R;Ikeuchi, M.; Inoue, Y.
FEBS Lett. 280, 332-334, 1991
A;Title: Two new components of 9 and 14 kDa from spinach photosystem I complex.
A;Reference number: S14316; MUID:91192162; PMID:2013332
A;Accession: S14316
A;Molecule type: protein
A;Residues: 1-13 <IKE>
C;Keywords: membrane-associated complex; photosynthesis; photosystem I

Query Match 29.8%; Score 31; DB 2; Length 13;
Best Local Similarity 54.5%; Pred. No. 1.7e+02;
Matches 6; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

Qy 7 GSLKEYLPKNK 17
| : ||| |:|
Db 1 GVIDEYLEKSK 11

RESULT 4
S23361
protein-tyrosine kinase (EC 2.7.1.112) eek - human (fragment)
C;Species: Homo sapiens (man)
C;Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 04-Feb-2000
C;Accession: S23361
R;Chan, J.; Watt, V.M.
Oncogene 6, 1057-1061, 1991
A;Title: eek and erk, new members of the eph subclass of receptor protein-tyrosine kinases.
A;Reference number: S23361; MUID:91296384; PMID:1648701
A;Accession: S23361
A;Status: nucleic acid sequence not shown
A;Molecule type: mRNA
A;Residues: 1-21 <CHA>
A;Cross-references: EMBL:X59291
C;Genetics:

A;Gene: GDB:EEK
A;Cross-references: GDB:125195; OMIM:176945
A;Map position: 1pter-1qter
C;Superfamily: protein-tyrosine kinase, receptor type eph; fibronectin type III repeat homology; protein kinase homology; SAM homology
C;Keywords: ATP; phosphotransferase; transmembrane protein; tyrosine-specific protein kinase

Query Match 27.9%; Score 29; DB 2; Length 21;
Best Local Similarity 41.7%; Pred. No. 5.8e+02;
Matches 5; Conservative 4; Mismatches 3; Indels 0; Gaps 0;

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Qy      2 EFLPSGSLKEYL 13
          |:: :||| :|
Db      9 EYMENGSLDTFL 20
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Search completed: February 6, 2003, 14:14:13
Job time : 32 secs

GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: February 6, 2003, 14:14:01 ; Search time 11 Seconds
(without alignments)
40.308 Million cell updates/sec

Title: US-10-038-612-73
Perfect score: 104
Sequence: 1 MEFLPSGSLKEYLPKNKNKI 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 129505 seqs, 22169297 residues

Total number of hits satisfying chosen parameters: 41496

Minimum DB seq length: 0
Maximum DB seq length: 25

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

Database : Published_Applications_AA:*
1: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep:*
2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep:*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep:*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep:*
6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep:*
7: /cgn2_6/ptodata/2/pubpaa/PCTUS_PUBCOMB.pep:*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep:*
10: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep:*
11: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep:*
12: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep:*
13: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep:*
14: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	104	100.0	20	9	US-10-038-612-73	Sequence 73, Appl
2	104	100.0	21	9	US-10-038-612-141	Sequence 141, App
3	67	64.4	20	9	US-10-038-612-74	Sequence 74, Appl
4	63	60.6	13	9	US-10-038-612-142	Sequence 142, App
5	59	56.7	21	9	US-10-038-612-146	Sequence 146, App
6	58	55.8	18	9	US-10-038-612-76	Sequence 76, Appl
7	57	54.8	20	9	US-10-038-612-145	Sequence 145, App
8	54	51.9	20	9	US-10-038-612-75	Sequence 75, Appl
9	43	41.3	21	9	US-10-032-330-41	Sequence 41, Appl
10	41	39.4	19	9	US-10-038-612-29	Sequence 29, Appl
11	40	38.5	20	9	US-10-038-612-66	Sequence 66, Appl
12	38	36.5	22	9	US-10-038-612-80	Sequence 80, Appl
13	37	35.6	21	9	US-10-038-612-39	Sequence 39, Appl
14	37	35.6	23	9	US-10-038-612-133	Sequence 133, App
15	37	35.6	23	10	US-09-864-761-35936	Sequence 35936, A
16	36	34.6	19	9	US-10-038-612-71	Sequence 71, Appl
17	36	34.6	19	9	US-10-038-612-136	Sequence 136, App
18	36	34.6	20	9	US-10-038-612-63	Sequence 63, Appl
19	36	34.6	20	9	US-10-038-612-163	Sequence 163, App
20	35	33.7	13	9	US-10-038-612-143	Sequence 143, App
21	35	33.7	22	9	US-10-038-612-79	Sequence 79, Appl
22	35	33.7	22	9	US-10-038-612-153	Sequence 153, App
23	34	32.7	20	9	US-10-038-612-65	Sequence 65, Appl
24	34	32.7	21	9	US-10-038-612-43	Sequence 43, Appl
25	34	32.7	21	9	US-10-038-612-45	Sequence 45, Appl
26	34	32.7	22	9	US-10-038-612-115	Sequence 115, App
27	34	32.7	22	9	US-10-038-612-130	Sequence 130, App
28	34	32.7	23	9	US-10-038-612-132	Sequence 132, App
29	33	31.7	15	9	US-10-038-612-152	Sequence 152, App
30	32.5	31.2	21	9	US-10-038-612-48	Sequence 48, Appl
31	32.5	31.2	22	9	US-10-038-612-99	Sequence 99, Appl
32	32	30.8	15	10	US-09-767-460-4	Sequence 4, Appli
33	32	30.8	18	9	US-10-038-612-83	Sequence 83, Appl
34	32	30.8	18	9	US-10-038-612-92	Sequence 92, Appl
35	32	30.8	19	9	US-10-038-612-4	Sequence 4, Appli
36	32	30.8	19	9	US-10-038-612-11	Sequence 11, Appl

37	32	30.8	19	9	US-10-038-612-164	Sequence 164, App
38	32	30.8	19	9	US-10-032-330-13	Sequence 13, Appl
39	32	30.8	20	9	US-10-038-612-64	Sequence 64, Appl
40	32	30.8	21	9	US-10-032-330-42	Sequence 42, Appl
41	32	30.8	23	9	US-10-038-612-120	Sequence 120, App
42	31	29.8	18	9	US-10-038-612-85	Sequence 85, Appl
43	31	29.8	19	12	US-10-012-030A-78	Sequence 78, Appl
44	31	29.8	20	10	US-09-864-761-36506	Sequence 36506, A
45	31	29.8	21	9	US-10-038-612-38	Sequence 38, Appl
46	31	29.8	21	9	US-10-038-612-42	Sequence 42, Appl
47	31	29.8	21	9	US-10-038-612-44	Sequence 44, Appl
48	31	29.8	21	10	US-09-925-300-1816	Sequence 1816, Ap
49	31	29.8	22	9	US-10-038-612-104	Sequence 104, App
50	31	29.8	22	9	US-10-038-612-149	Sequence 149, App
51	31	29.8	22	9	US-10-038-612-150	Sequence 150, App
52	31	29.8	22	9	US-10-032-330-40	Sequence 40, Appl
53	30.5	29.3	21	9	US-10-038-612-41	Sequence 41, Appl
54	30	28.8	21	9	US-10-038-612-40	Sequence 40, Appl
55	30	28.8	21	12	US-10-001-879-122	Sequence 122, App
56	30	28.8	23	9	US-10-038-612-122	Sequence 122, App
57	29	27.9	11	9	US-10-038-612-144	Sequence 144, App
58	29	27.9	14	10	US-09-983-067-1	Sequence 1, Appli
59	29	27.9	18	9	US-10-038-612-84	Sequence 84, Appl
60	29	27.9	19	9	US-10-038-612-5	Sequence 5, Appli
61	29	27.9	20	10	US-09-864-761-35505	Sequence 35505, A
62	29	27.9	21	10	US-09-205-658-189	Sequence 189, App
63	29	27.9	22	10	US-09-934-289A-50	Sequence 50, Appl
64	28.5	27.4	20	9	US-10-038-612-30	Sequence 30, Appl
65	28	26.9	13	9	US-10-202-189-2	Sequence 2, Appli
66	28	26.9	13	9	US-10-202-189-35	Sequence 35, Appl
67	28	26.9	19	9	US-10-038-612-9	Sequence 9, Appli
68	28	26.9	19	9	US-10-038-612-33	Sequence 33, Appl
69	28	26.9	19	9	US-10-038-612-34	Sequence 34, Appl
70	28	26.9	19	10	US-09-864-761-39185	Sequence 39185, A
71	28	26.9	20	9	US-10-038-612-151	Sequence 151, App
72	28	26.9	22	9	US-10-038-612-159	Sequence 159, App
73	28	26.9	24	10	US-09-030-619-174	Sequence 174, App
74	27	26.0	9	10	US-09-844-813-12	Sequence 12, Appl
75	27	26.0	12	9	US-10-107-786-6	Sequence 6, Appli
76	27	26.0	16	9	US-09-826-290-55	Sequence 55, Appl
77	27	26.0	16	9	US-09-826-290-121	Sequence 121, App
78	27	26.0	16	9	US-09-826-290-252	Sequence 252, App
79	27	26.0	16	9	US-09-826-290-254	Sequence 254, App
80	27	26.0	16	9	US-09-826-290-257	Sequence 257, App
81	27	26.0	16	9	US-09-826-290-447	Sequence 447, App

82	27	26.0	16	9	US-09-909-460-45	Sequence 45, Appl
83	27	26.0	16	10	US-09-844-813-11	Sequence 11, Appl
84	27	26.0	16	10	US-09-791-378-9	Sequence 9, Appli
85	27	26.0	16	10	US-09-791-378-44	Sequence 44, Appl
86	27	26.0	16	10	US-09-791-378-78	Sequence 78, Appl
87	27	26.0	16	10	US-09-791-378-110	Sequence 110, App
88	27	26.0	16	10	US-09-791-378-113	Sequence 113, App
89	27	26.0	16	10	US-09-791-378-157	Sequence 157, App
90	27	26.0	16	10	US-09-791-378-161	Sequence 161, App
91	27	26.0	16	10	US-09-791-378-165	Sequence 165, App
92	27	26.0	16	10	US-09-791-378-228	Sequence 228, App
93	27	26.0	16	10	US-09-791-378-236	Sequence 236, App
94	27	26.0	16	10	US-09-791-378-239	Sequence 239, App
95	27	26.0	16	10	US-09-791-378-275	Sequence 275, App
96	27	26.0	16	10	US-09-791-378-339	Sequence 339, App
97	27	26.0	16	10	US-09-791-378-388	Sequence 388, App
98	27	26.0	16	10	US-09-791-378-555	Sequence 555, App
99	27	26.0	16	10	US-09-791-378-588	Sequence 588, App
100	27	26.0	16	10	US-09-791-378-612	Sequence 612, App
101	27	26.0	16	10	US-09-791-378-620	Sequence 620, App
102	27	26.0	16	10	US-09-791-378-646	Sequence 646, App
103	27	26.0	18	9	US-10-038-612-90	Sequence 90, Appl
104	27	26.0	18	12	US-10-113-573-2	Sequence 2, Appli
105	27	26.0	20	9	US-10-038-612-47	Sequence 47, Appl
106	27	26.0	21	9	US-10-038-612-93	Sequence 93, Appl
107	27	26.0	21	9	US-10-038-612-171	Sequence 171, App
108	27	26.0	22	9	US-10-038-612-134	Sequence 134, App
109	27	26.0	25	10	US-09-864-761-47928	Sequence 47928, A
110	26	25.0	9	9	US-09-842-930A-42	Sequence 42, Appl
111	26	25.0	10	8	US-08-452-843A-18	Sequence 18, Appl
112	26	25.0	10	9	US-09-842-930A-53	Sequence 53, Appl
113	26	25.0	13	10	US-09-897-107-75	Sequence 75, Appl
114	26	25.0	17	9	US-09-968-561A-158	Sequence 158, App
115	26	25.0	17	9	US-10-146-305-9	Sequence 9, Appli
116	26	25.0	17	10	US-09-864-761-47399	Sequence 47399, A
117	26	25.0	17	10	US-09-192-854-90	Sequence 90, Appl
118	26	25.0	18	9	US-10-038-612-91	Sequence 91, Appl
119	26	25.0	18	9	US-09-865-989-206	Sequence 206, App
120	26	25.0	18	9	US-09-865-989-207	Sequence 207, App
121	26	25.0	19	9	US-10-038-612-12	Sequence 12, Appl
122	26	25.0	19	9	US-10-038-612-77	Sequence 77, Appl
123	26	25.0	20	9	US-10-038-612-72	Sequence 72, Appl
124	26	25.0	20	9	US-10-038-612-131	Sequence 131, App
125	26	25.0	21	9	US-10-038-612-117	Sequence 117, App
126	26	25.0	21	9	US-10-038-612-170	Sequence 170, App

ALIGNMENTS

RESULT 1
US-10-038-612-73
; Sequence 73, Application US/10038612
; Patent No. US20020160478A1
; GENERAL INFORMATION:
; APPLICANT: Ben-Sasson, Shmuel A.
; TITLE OF INVENTION: Short Peptides Which Selectively
; TITLE OF INVENTION: Modulate the Activity of Protein Kinases
; FILE REFERENCE: 1242.1029-000 (CMCC-679)
; CURRENT APPLICATION NUMBER: US/10/038,612
; CURRENT FILING DATE: 2002-01-08
; PRIOR APPLICATION NUMBER: US 09/161,094
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 172
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 73
; LENGTH: 20
; TYPE: PRT
; ORGANISM: unknown
; FEATURE:
; OTHER INFORMATION: Jak1
US-10-038-612-73

Query Match 100.0%; Score 104; DB 9; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.4e-09;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEFLPSGSLKEYLPKNKNKI 20
||||||||||||||||||||
Db 1 MEFLPSGSLKEYLPKNKNKI 20

RESULT 9
US-10-032-330-41
; Sequence 41, Application US/10032330
; Patent No. US20020165150A1
; GENERAL INFORMATION:
; APPLICANT: Ben-Sasson, Shmuel
; TITLE OF INVENTION: Tissue Remodeling
; FILE REFERENCE: BEN-SASSON=7
; CURRENT APPLICATION NUMBER: US/10/032,330

; CURRENT FILING DATE: 2001-12-31
; PRIOR APPLICATION NUMBER: PCT/US00/32852
; PRIOR FILING DATE: 2000-12-04
; PRIOR APPLICATION NUMBER: US 09/161,094
; PRIOR FILING DATE: 1998-09-25
; NUMBER OF SEQ ID NOS: 59
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 41
; LENGTH: 21
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: synthetic
US-10-032-330-41

Query Match 41.3%; Score 43; DB 9; Length 21;
Best Local Similarity 61.5%; Pred. No. 2.9;
Matches 8; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

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        ||: |:||| :||
Db    1 MEYYPNGSLCKYL 13
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RESULT 15
US-09-864-761-35936
; Sequence 35936, Application US/09864761
; Patent No. US20020048763A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharron G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; APPLICANT: Chen, Wensheng
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR
; TITLE OF INVENTION: GENE EXPRESSION ANALYSIS BY MICROARRAY
; FILE REFERENCE: Aeomica-X-1
; CURRENT APPLICATION NUMBER: US/09/864,761
; CURRENT FILING DATE: 2001-05-23
; PRIOR APPLICATION NUMBER: US 60/180,312
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: US 60/207,456
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: US 09/632,366

; PRIOR FILING DATE: 2000-08-03
; PRIOR APPLICATION NUMBER: GB 24263.6
; PRIOR FILING DATE: 2000-10-04
; PRIOR APPLICATION NUMBER: US 60/236,359
; PRIOR FILING DATE: 2000-09-27
; PRIOR APPLICATION NUMBER: PCT/US01/00666
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00667
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00664
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00669
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00665
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00668
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00663
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00662
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00661
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: PCT/US01/00670
; PRIOR FILING DATE: 2001-01-30
; PRIOR APPLICATION NUMBER: US 60/234,687
; PRIOR FILING DATE: 2000-09-21
; PRIOR APPLICATION NUMBER: US 09/608,408
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: US 09/774,203
; PRIOR FILING DATE: 2001-01-29
; NUMBER OF SEQ ID NOS: 49117
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 35936
; LENGTH: 23
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC010102.1
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.95
; OTHER INFORMATION: EXPRESSED IN HEART, SIGNAL = 1.1
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 7.2
US-09-864-761-35936

Query Match 35.6%; Score 37; DB 10; Length 23;

Best Local Similarity 63.6%; Pred. No. 22;
Matches 7; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

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          || ||: |:||
Db      3 FLKSGTTKQYL 13
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Search completed: February 6, 2003, 14:17:34
Job time : 22 secs

GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: February 6, 2003, 14:08:25 ; Search time 35 Seconds
(without alignments)
76.143 Million cell updates/sec

Title: US-10-038-612-73
Perfect score: 104
Sequence: 1 MEFLPSGSLKEYLPKNKNKI 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 320064

Minimum DB seq length: 0
Maximum DB seq length: 25

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

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23: /SIDS2/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	104	100.0	20	21	AAY98358	Alpha D peptide de
2	104	100.0	21	21	AAY98426	Alpha D peptide de
3	67	64.4	20	21	AAY98359	Alpha D peptide de
4	63	60.6	13	21	AAY98427	Alpha D peptide de
5	59	56.7	21	21	AAY98431	Alpha D peptide de
6	58	55.8	18	21	AAY98361	Alpha D peptide de
7	57	54.8	20	21	AAY98430	Alpha D peptide de
8	54	51.9	20	21	AAY98360	Alpha D peptide de
9	41	39.4	14	22	AAB71075	Human thyrosin pro
10	41	39.4	14	22	AAB71076	Human thyrosin pro
11	41	39.4	19	21	AAY98314	Alpha D peptide de
12	40	38.5	20	21	AAY98351	Alpha D peptide de
13	39	37.5	25	18	AAW14695	Human p53 regulato
14	38	36.5	22	21	AAY98365	Alpha D peptide de
15	37	35.6	21	21	AAY98324	Alpha D peptide de
16	37	35.6	23	21	AAY98418	Alpha D peptide de
17	37	35.6	23	22	ABB20638	Protein #2637 enco
18	37	35.6	23	22	AAM16215	Peptide #2649 enco
19	37	35.6	23	23	ABG37971	Human peptide enco
20	36	34.6	19	21	AAY98356	Alpha D peptide de
21	36	34.6	19	21	AAY98421	Alpha D peptide de
22	36	34.6	20	21	AAY98348	Alpha D peptide de
23	36	34.6	20	21	AAY98448	Alpha D peptide de
24	35	33.7	13	21	AAY98428	Alpha D peptide de
25	35	33.7	22	21	AAY98364	Alpha D peptide de
26	35	33.7	22	21	AAY98438	Alpha D peptide de
27	34	32.7	20	21	AAY98350	Alpha D peptide de

28	34	32.7	21	21	AAY98328	Alpha D peptide de
29	34	32.7	21	21	AAY98330	Alpha D peptide de
30	34	32.7	22	21	AAY98400	Alpha D peptide de
31	34	32.7	22	21	AAY98415	Alpha D peptide de
32	34	32.7	23	21	AAY98417	Alpha D peptide de
33	33	31.7	14	21	AAY82134	Monoclonal antibod
34	33	31.7	15	21	AAY98437	Alpha D peptide de
35	33	31.7	15	22	AAG89450	p53 DR supermotif
36	33	31.7	16	13	AAR28973	Selectin based ant
37	33	31.7	16	22	AAB68799	Cuphea KS I FAS pe
38	33	31.7	17	17	AAR89866	Cytochrome P450 2C
39	33	31.7	17	19	AAW64076	Human cytochrome P
40	33	31.7	25	18	AAW14696	Mouse p53 regulato
41	32.5	31.2	20	21	AAB28219	Multi-drug resista
42	32.5	31.2	21	21	AAY98333	Alpha D peptide de
43	32.5	31.2	22	21	AAY98384	Alpha D peptide de
44	32	30.8	14	16	AAR82076	Malaria CSB protei
45	32	30.8	14	23	ABG30545	Alpha-isomaltosylg
46	32	30.8	15	22	AAB83344	Dopamine binding p
47	32	30.8	15	23	AAU82764	Human Dopamine D2
48	32	30.8	18	12	AAR10217	Malaria parasite c
49	32	30.8	18	13	AAR28972	Selectin based ant
50	32	30.8	18	16	AAR82075	Malaria CSA protei
51	32	30.8	18	18	AAW35508	Pertussis toxin S2
52	32	30.8	18	21	AAY98368	Alpha D peptide de
53	32	30.8	18	21	AAY98377	Alpha D peptide de
54	32	30.8	19	21	AAY98289	Alpha D peptide de
55	32	30.8	19	21	AAY98296	Alpha D peptide de
56	32	30.8	19	21	AAY98449	Alpha D peptide de
57	32	30.8	20	11	AAR05018	Papilloma virus ty
58	32	30.8	20	21	AAY98349	Alpha D peptide de
59	32	30.8	21	22	AAE04716	Human catalytic su
60	32	30.8	23	21	AAY98405	Alpha D peptide de
61	32	30.8	24	21	AAY69444	Antimicrobial pept
62	31	29.8	7	20	AAY67196	Mutated SV40 T ant
63	31	29.8	9	20	AAY24896	Peptide SV40 mutan
64	31	29.8	11	20	AAY67198	Spacer motif comju
65	31	29.8	12	20	AAY32807	Tyrosine-protein k
66	31	29.8	13	16	AAR72547	Pertussis holotoxi
67	31	29.8	13	20	AAY43365	Pertussis toxin B-
68	31	29.8	13	20	AAY41818	Pertussis holotoxi
69	31	29.8	13	20	AAW95228	PT toxin beta-subu
70	31	29.8	13	21	AAY68367	Pertussis toxin S2
71	31	29.8	13	22	AAB66241	B pertussis C-term
72	31	29.8	14	23	AAU97184	Human GPCR HGPRBMY

ALIGNMENTS

RESULT 1
AAY98358
ID AAY98358 standard; Peptide; 20 AA.
XX
AC AAY98358;
XX
DT 31-JUL-2000 (first entry)
XX
DE Alpha D peptide derived from Jak1 SEQ ID NO:73.
XX
KW Alpha D peptide; Alpha D region; protein kinase; modulation; activity;
KW cytostatic; anti-diabetic; anorectic; antiinflammatory; dermatological;
KW immunosuppressive; immunomodulator; osteopathic; cardiant; vasotropic;
KW antiarteriosclerotic; protein kinase modulator; cancer; proliferation;
KW restenosis; atherosclerosis; skin disorder; diabetes; obesity;
KW central nervous system disorder; inflammatory disorder; osteoporosis;
KW autoimmune disease; immune disorder; cardiovascular disease.
XX
OS Homo sapiens.
XX
PN WO200018895-A1.
XX
PD 06-APR-2000.
XX
PF 24-SEP-1999; 99WO-US22106.
XX
PR 25-SEP-1998; 98US-0161094.
XX
PA (CHIL-) CHILDRENS MEDICAL CENT.
PA (YISS) YISSUM RES DEV CO HEBREW UNIV JERUSALEM.
XX
PI Ben-Sasson SA;
XX
DR WPI; 2000-328722/28.
XX
PT Peptide derivatives of protein kinase alpha D regions which selectively
PT modulate the activity of protein kinases -
XX
PS Claim 41; Fig 1; 148pp; English.
XX
CC The present invention describes a peptide derivative (A) of the protein
CC kinase alpha D region comprising 5-30 amino acids, which modulates

CC the activity of the protein kinase. AAY98286 to AAY98455 represent
CC peptides derived from protein kinase alpha D regions, which are used in
CC the exemplification of the present invention. The peptides have
CC cytostatic, anti-diabetic, anorectic, antiinflammatory, dermatological,
CC cardiant, immunosuppressive, immunomodulator, osteopathic, vasotropic
CC and antiarteriosclerotic activities, and are protein kinase modulators.
CC The peptides can be used as test peptides to identify protein kinase
CC modulators. They can also be used to modulate the activity of a protein
CC kinase in a subject, and in a method of detecting a ligand that binds
CC to the alpha D region of a protein kinase. They may be used to
CC produce antibodies that bind to the alpha D region of a protein kinase.
CC The peptides are useful in the treatment of diseases caused by over-
CC or under-activity of a protein kinase, e.g. cancer, diseases caused by
CC proliferation of smooth muscle (e.g. restenosis and atherosclerosis),
CC skin disorders, diabetes, obesity, diseases of the central nervous
CC system, inflammatory disorders, autoimmune diseases and other immune
CC disorders, osteoporosis and cardiovascular diseases.
XX
SQ Sequence 20 AA;

Query Match 100.0%; Score 104; DB 21; Length 20;
Best Local Similarity 100.0%; Pred. No. 5.5e-10;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEFLPSGSLKEYLPKNKNKI 20
||||||||||||||||||||
Db 1 MEFLPSGSLKEYLPKNKNKI 20

RESULT 9
AAB71075
ID AAB71075 standard; peptide; 14 AA.
XX
AC AAB71075;
XX
DT 22-AUG-2001 (first entry)
XX
DE Human thyrosin protein kinase JAK3 derived peptide #104.
XX
KW EPOR; position-specific array; erythropoietin; erythropoietin receptor;
KW EPO; human; mass spectrometry; intracellular protein ligand; MALDI;
KW matrix-assisted laser desorption ionization; target receptor;
KW peptide array; JAK3; thyrosin protein kinase.
XX

OS Homo sapiens.
XX
PN DE19943743-A1.
XX
PD 15-MAR-2001.
XX
PF 03-SEP-1999; 99DE-1043743.
XX
PR 03-SEP-1999; 99DE-1043743.
XX
PA (JERI-) JERINI BIOTOOLS GMBH.
XX
PI Krause E, Schneider-Mergener J, Bittorf T;
XX
DR WPI; 2001-283056/30.
XX
PT Identifying members of specific binding pairs, especially
PT receptor-protein pairs, comprises analyzing ligands bound to an array
PT of binding molecules by mass spectrometry -
XX
PS Disclosure; Fig 5; 10pp; German.
XX
CC This invention describes a novel method for identifying members of
CC specific binding pairs which comprises producing a position-specific
CC array of binding molecules on a support by applying small volumes of
CC reagents and performing at least two sequential reactions, incubating
CC the array with a mixture of ligands, removing any unbound ligands, and
CC characterizing any bound ligands by mass spectrometry. The method is used
CC for identifying proteins or nucleic acids that bind to a target protein
CC or nucleic acid using an array of peptides or oligonucleotides
CC representing fragments of the target protein or nucleic acid, especially
CC for identifying intracellular protein ligands for a target receptor (e.g.
CC erythropoietin receptor) by: (a) synthesizing an array of peptides
CC (preferably comprising 6-15 amino acids) corresponding to fragments of
CC the receptor, contacting the array with a radiolabelled cell lysate; (b)
CC determining the positions of bound proteins by autoradiography; (c)
CC cleaving the bound proteins from the array (e.g. by proteolytically or
CC chemically cleaving a linker between the peptides and the support); (d)
CC determining the molecular weights of the bound proteins by mass
CC spectrometry, especially using matrix-assisted laser desorption
CC ionization or electrospray ionization; and (e) comparing the results with
CC a database of protein molecular weights. The process is readily
CC automated. AAB70972-AAB71078 represent peptide derived from the human
CC erythropoietin receptor (EPOR) which are used to illustrate the method of
CC the invention.

XX
SQ Sequence 14 AA;

Query Match 39.4%; Score 41; DB 22; Length 14;
Best Local Similarity 63.6%; Pred. No. 6.4;
Matches 7; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

Qy 1 MEFLPSGSLKE 11
||:||||.|::
Db 4 MEYLPSGCLRD 14

Search completed: February 6, 2003, 14:13:10
Job time : 65 secs

GenCore version 5.1.3

OM protein - protein search, using sw model

Run on: February 6, 2003, 14:12:05 ; Search time 15 Seconds
(without alignments)
39.231 Million cell updates/sec

Title: US-10-038-612-73
Perfect score: 104
Sequence: 1 MEFLPSGSLKEYLPKNKNKI 20

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 147762

Minimum DB seq length: 0
Maximum DB seq length: 25

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 1000 summaries

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6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description

1	33	31.7	16	2	US-08-140-137A-23	Sequence 23, Appl
2	33	31.7	16	2	US-08-140-137A-36	Sequence 36, Appl
3	33	31.7	17	1	US-08-201-118-43	Sequence 43, Appl
4	33	31.7	17	2	US-08-238-821B-43	Sequence 43, Appl
5	33	31.7	17	5	PCT-US95-05744-43	Sequence 43, Appl
6	32	30.8	18	2	US-08-140-137A-22	Sequence 22, Appl
7	32	30.8	20	1	US-07-678-974D-61	Sequence 61, Appl
8	32	30.8	20	2	US-08-945-168-67	Sequence 67, Appl
9	32	30.8	22	2	US-08-140-137A-34	Sequence 34, Appl
10	31	29.8	7	6	5179007-6	Patent No. 5179007
11	31	29.8	13	2	US-08-292-968-28	Sequence 28, Appl
12	31	29.8	13	2	US-08-467-974-28	Sequence 28, Appl
13	31	29.8	13	2	US-08-467-536-28	Sequence 28, Appl
14	31	29.8	13	3	US-08-467-976-28	Sequence 28, Appl
15	31	29.8	13	4	US-09-082-514-28	Sequence 28, Appl
16	31	29.8	17	4	US-09-308-022-3	Sequence 3, Appli
17	30	28.8	22	1	US-07-928-930A-4	Sequence 4, Appli
18	30	28.8	22	1	US-08-288-568-4	Sequence 4, Appli
19	30	28.8	22	1	US-08-487-461-4	Sequence 4, Appli
20	30	28.8	22	1	US-08-432-691-4	Sequence 4, Appli
21	30	28.8	22	1	US-08-487-459-4	Sequence 4, Appli
22	30	28.8	22	3	US-09-307-621-5	Sequence 5, Appli
23	29	27.9	11	4	US-09-171-654-13	Sequence 13, Appl
24	29	27.9	13	1	US-08-480-463-10	Sequence 10, Appl
25	29	27.9	13	3	US-08-990-015-9	Sequence 9, Appli
26	29	27.9	13	3	US-08-469-433B-10	Sequence 10, Appl
27	29	27.9	13	5	PCT-US94-07916-10	Sequence 10, Appl
28	29	27.9	14	1	US-07-907-190-13	Sequence 13, Appl
29	29	27.9	17	1	US-08-244-626-14	Sequence 14, Appl
30	29	27.9	18	6	5219987-3	Patent No. 5219987
31	29	27.9	21	4	US-08-557-006C-33	Sequence 33, Appl
32	29	27.9	24	2	US-08-140-137A-28	Sequence 28, Appl
33	28.5	27.4	20	2	US-08-564-972-31	Sequence 31, Appl
34	28	26.9	10	4	US-09-171-654-64	Sequence 64, Appl
35	28	26.9	12	1	US-08-658-130-5	Sequence 5, Appli
36	28	26.9	12	4	US-09-039-780A-108	Sequence 108, App
37	28	26.9	12	4	US-09-039-780A-115	Sequence 115, App
38	28	26.9	12	5	PCT-US96-08723-5	Sequence 5, Appli
39	28	26.9	13	1	US-08-480-463-9	Sequence 9, Appli
40	28	26.9	13	1	US-08-658-130-6	Sequence 6, Appli
41	28	26.9	13	1	US-08-658-130-8	Sequence 8, Appli
42	28	26.9	13	2	US-08-480-190-40	Sequence 40, Appl
43	28	26.9	13	2	US-08-796-598-12	Sequence 12, Appl
44	28	26.9	13	2	US-08-447-175A-12	Sequence 12, Appl

45	28	26.9	13	2	US-08-488-379-40	Sequence 40, Appl
46	28	26.9	13	2	US-08-480-445A-8	Sequence 8, Appli
47	28	26.9	13	2	US-08-480-446-8	Sequence 8, Appli
48	28	26.9	13	3	US-08-990-015-8	Sequence 8, Appli
49	28	26.9	13	3	US-08-469-433B-9	Sequence 9, Appli
50	28	26.9	13	4	US-08-469-899A-8	Sequence 8, Appli
51	28	26.9	13	5	PCT-US93-03406-9	Sequence 9, Appli
52	28	26.9	13	5	PCT-US93-07545-40	Sequence 40, Appl
53	28	26.9	13	5	PCT-US94-07916-9	Sequence 9, Appli
54	28	26.9	13	5	PCT-US96-08723-6	Sequence 6, Appli
55	28	26.9	13	5	PCT-US96-08723-8	Sequence 8, Appli
56	28	26.9	14	4	US-09-039-780A-109	Sequence 109, App
57	28	26.9	15	2	US-08-553-257A-52	Sequence 52, Appl
58	28	26.9	15	3	US-08-335-844A-18	Sequence 18, Appl
59	28	26.9	16	4	US-08-986-659B-46	Sequence 46, Appl
60	28	26.9	16	4	US-09-039-780A-107	Sequence 107, App
61	28	26.9	17	4	US-08-986-659B-45	Sequence 45, Appl
62	28	26.9	18	1	US-08-193-521-9	Sequence 9, Appli
63	28	26.9	18	1	US-08-434-120-103	Sequence 103, App
64	28	26.9	18	1	US-08-465-325-102	Sequence 102, App
65	28	26.9	18	4	US-09-115-737-102	Sequence 102, App
66	28	26.9	19	4	US-09-039-780A-86	Sequence 86, Appl
67	28	26.9	20	4	US-09-039-780A-85	Sequence 85, Appl
68	28	26.9	22	4	US-09-039-780A-102	Sequence 102, App
69	28	26.9	22	4	US-09-039-780A-111	Sequence 111, App
70	28	26.9	22	4	US-09-039-780A-120	Sequence 120, App
71	27.5	26.4	16	3	US-09-295-186-1	Sequence 1, Appli
72	27.5	26.4	22	6	5474913-3	Patent No. 5474913
73	27	26.0	7	2	US-08-968-676-80	Sequence 80, Appl
74	27	26.0	8	4	US-08-976-255-53	Sequence 53, Appl
75	27	26.0	9	4	US-09-242-131A-12	Sequence 12, Appl
76	27	26.0	9	4	US-09-615-283-12	Sequence 12, Appl
77	27	26.0	12	2	US-08-923-274-6	Sequence 6, Appli
78	27	26.0	12	2	US-08-959-536-6	Sequence 6, Appli
79	27	26.0	12	4	US-08-747-599A-10	Sequence 10, Appl
80	27	26.0	15	2	US-08-140-137A-35	Sequence 35, Appl
81	27	26.0	15	2	US-08-480-190-135	Sequence 135, App
82	27	26.0	15	2	US-08-480-190-247	Sequence 247, App
83	27	26.0	15	2	US-08-488-379-135	Sequence 135, App
84	27	26.0	15	2	US-08-488-379-247	Sequence 247, App
85	27	26.0	15	2	US-08-553-257A-50	Sequence 50, Appl
86	27	26.0	15	5	PCT-US93-07545-135	Sequence 135, App
87	27	26.0	15	5	PCT-US93-07545-247	Sequence 247, App
88	27	26.0	16	1	US-08-787-547-45	Sequence 45, Appl
89	27	26.0	16	2	US-08-480-190-134	Sequence 134, App

560	23	22.1	5	2	US-08-598-873-51	Sequence 51, Appl
561	23	22.1	5	4	US-08-605-430-51	Sequence 51, Appl
562	23	22.1	7	2	US-08-968-676-79	Sequence 79, Appl
563	23	22.1	7	4	US-08-810-712-15	Sequence 15, Appl
793	22	21.2	6	1	US-08-240-514-16	Sequence 16, Appl
794	22	21.2	6	1	US-08-240-514-32	Sequence 32, Appl
795	22	21.2	6	2	US-08-612-302A-16	Sequence 16, Appl
796	22	21.2	6	2	US-08-612-302A-32	Sequence 32, Appl
797	22	21.2	6	2	US-08-672-610A-2	Sequence 2, Appli
798	22	21.2	6	2	US-08-676-378-8	Sequence 8, Appli

ALIGNMENTS

RESULT 1
US-08-140-137A-23
; Sequence 23, Application US/08140137A
; Patent No. 5817617
; GENERAL INFORMATION:
; APPLICANT: TUOMANEN, ELAINE
; APPLICANT: MASURE, H. R.
; TITLE OF INVENTION: ANALOGS OF ENDOTHELIAL LEUKOCYTE
; TITLE OF INVENTION: ADHESION MOLECULE (ELAM)
; NUMBER OF SEQUENCES: 49
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Klauber & Jackson
; STREET: 411 Hackensack Avenue
; CITY: Hackensack
; STATE: New Jersey
; COUNTRY: USA
; ZIP: 07601
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/140,137A
; FILING DATE: 27-MAY-1994
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Jackson Esq., David A.
; REGISTRATION NUMBER: 26,742
; REFERENCE/DOCKET NUMBER: 600-1-096
; TELECOMMUNICATION INFORMATION:

; TELEPHONE: 201 487-5800
; TELEFAX: 201 343-1684
; TELEX: 133521
; INFORMATION FOR SEQ ID NO: 23:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; HYPOTHETICAL: NO
; FRAGMENT TYPE: internal
US-08-140-137A-23

Query Match 31.7%; Score 33; DB 2; Length 16;
Best Local Similarity 70.0%; Pred. No. 45;
Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 4 LPSGSLKEYL 13
| || |:|||
Db 7 LGSGDLQEYL 16

RESULT 10
5179007-6
;Patent No. 5179007
; APPLICANT: JARVIS, DONALD L.;CARRINGTON, JAMES C.
; TITLE OF INVENTION: METHOD AND VECTOR FOR THE PURIFICATION
;OF FOREIGN PROTEINS
; NUMBER OF SEQUENCES: 19
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/377,438
; FILING DATE: 07-JUL-1989
;SEQ ID NO:6:
; LENGTH: 7
5179007-6

Query Match 29.8%; Score 31; DB 6; Length 7;
Best Local Similarity 71.4%; Pred. No. 1.9e+05;
Matches 5; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 14 PKNKNKI 20
|||| |:
Db 1 PKNKRKV 7
Search completed: February 6, 2003, 14:14:37
Job time : 36 secs